

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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PROBLEMS INVOLVED IN
STANDARDIZING STATE NORMAL
SCHOOLS

BY

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,

BUREAU OF EDUCATION,

Washington, September 27, 1915.

SIR: The value of the schools, and especially of the schools for younger children, depends almost wholly on the ability, knowledge, and skill of the teachers. Like every other complex and difficult art, the art of teaching can be acquired only through careful training and the conscious application of underlying principles. The consciousness of these facts has given rise in all culture countries to schools maintained at public cost for the purpose of giving young men and women preparing for teaching such instruction in principles, methods, and devices, and such practice in their application as will enable them to begin the work of teaching with some degree of certainty of success. In this country such schools are called normal schools. Although the United States has done less for the preparation of its teachers than other countries in proportion to expenditures for education and to numbers of children in school, there are in this country 235 State normal schools, with a total attendance of about 89,537 students and an annual expenditure of \$8,970,377. These figures do not include municipal and private normal schools. A decade and a half ago appropriations for the support of these State normal schools were \$2,510,934 and the annual enrollment of students was 44,808. Because of the large expenditures for normal schools and a growing appreciation of the importance of their place in our systems of public education, there is an increasing general desire for some intelligent accounting of their organization and work. For this reason and for the purpose of laying a foundation for such detailed studies of many specific phases of their organization and work as will aid in such modifications and readjustments as may seem desirable, Dr. Charles H. Judd, director of the school of education of the University of Chicago, and Dr. Samuel C. Parker, dean of the college of education of the University of Chicago, both special collaborators in this bureau, have, at my request, made a general preliminary study of these schools and have reported the results of their studies in the accompanying manuscript. I recommend that this manuscript be published as a bulletin of the Bureau of Education under the title "Problems Involved in Standardizing State Normal Schools."

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

PREFACE.

This study of the State normal schools of the United States was undertaken at the request of the Bureau of Education in the summer of 1914. The material upon which the study is based was furnished by the authorities of the State normal schools and of State departments of education in the fall of 1914, in response to a request sent from the Bureau of Education.

The plans for the bulletin were carefully organized by the authors working together. Chapters I and II and the concluding chapter were written primarily by Mr. Judd. The remaining chapters were written primarily by Mr. Parker. Each author revised his chapters, however, after they had been read and criticized by the other. As a consequence the bulletin presents a unified treatment of the whole topic. For the chapter on Administrative Control, Mr. D. R. Henry carried on in the spring of 1915 a rather elaborate study, based on an examination of the educational codes of all of the States and correspondence with many of the officers in charge of the normal schools in the States. Mr. J. B. Shouse rendered valuable assistance in connection with certain of the statistical parts of the study.

PROBLEMS INVOLVED IN STANDARDIZING STATE NORMAL SCHOOLS.

Chapter I:

INTRODUCTION: SCOPE OF THE BULLETIN.

Normal schools not now standardized.—Normal schools differ from each other very widely in organization, in admission requirements, in courses of study, and in modes of instruction. The explanation of this lack of uniformity is to be found in the fact that normal schools have never been a part of the system of higher education evolved in this country. Normal schools have grown up in isolation. While the colleges have been in the closest touch with each other through the organization of entrance examination boards and accrediting institutions, while high schools have been brought together by standard definitions of units, normal schools have stood apart. The typical normal school derives its financial support from legislative appropriations, receives its students without competition from a territory over which it exercises exclusive control, and has no difficulty in placing its graduates in positions which they regard as satisfactory. Furthermore, so urgent has been the demand in the country for teachers that school boards and superintendents have not been able to make rigid selections, with the result that standards of training have not been forced upon the normal schools from without.

Organization determined by accidental causes, often personal.—In a situation where relative isolation has not compelled normal schools to define themselves to others there has been the largest opportunity for the play of personal influences. A strong president has often dominated the policies of a normal school to a degree that is almost unbelievable. The faculty sometimes has little or no voice in determining the courses or the modes of admission. There is no State authority in most of the States which is strong enough to determine what shall be done in normal schools. The result is that within a single State there are the widest variations. One president with the ambition to develop his institution into a degree-granting university goes on his way, while his neighbor uses the funds granted by the same legislature to develop a normal school which hardly

announces its objection to granting degrees and limits its activities rigidly to the training of elementary teachers.

External causes stimulating movement toward standardization.—In recent years a number of causes have begun to break down the isolation of the normal school. First and foremost is the desire of normal graduates to enjoy the advantages of higher education in universities and colleges. The growth of summer schools at universities and the frequent transfer of normal school graduates to college and graduate courses show with clearness the desire of teachers to enjoy the advantages of all kinds of higher education. Normal schools, drawn into the current of higher education, have been called upon to announce more definitely their requirements for admission and to describe the content of their courses. What is a course in methods of teaching arithmetic? Is it a review of the course given in an elementary school or is it a discussion of the pedagogical principles on which such courses are arranged? What is a course in practice teaching? Does such a course require of the student any study of material, and does it afford him any adequate critical discussion of his work? There has been a sharp and at times unfriendly clash between normal schools and colleges in the effort to secure answers to such questions. The normal school often takes the position that it administers only high-grade courses, while the colleges express a frank doubt as to the value of these courses for mature students.

Traditions and relations of normal schools unique.—Perhaps the disagreement between normal schools and colleges can best be illustrated by the widespread dispute regarding foreign languages. The normal school has been historically related to the vernacular school, and its officers have had little patience with classical or even literary courses. The traditions of the college are of a totally different type. So long as no students passed from normal schools to colleges the normal schools were at liberty to hold to the vernacular, but as soon as normal-school graduates sought admission to higher institutions the controversy was on.

Effect of parallel development of departments of education in colleges and universities.—A second reason why normal schools have been called upon to define themselves arises because colleges and universities have in recent years entered the field of teacher training through the organization of departments of education and colleges of education. In the State universities the demand for preparation of high-school teachers has been heard, and generous provisions have in many cases been made for the work of preparing such teachers. The normal schools have looked upon this organization of teacher-training courses as undivided competition. Conversely, the university authorities have been critical of the courses in the normal schools.

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and the issue has been sharply drawn. Incidentally it may be remarked that college departments of education have usually been subjected to the closest scrutiny and sometimes to violent criticism by other college departments because of their supposed inferiority. It may even be admitted that entrance requirements in the departments of education have sometimes been lower than those for other college departments in the hope of meeting the competition of normal schools, and courses of inferior standard in the college have been tolerated for like reason. All of these disputes and efforts at adjustment have aroused a general inquiry about teacher-training courses which a generation ago would have been without interest except to a small group of specialists. Now the problem is known to all who are interested in education, and the discussion must go on until some satisfactory conclusion is reached.

General demand in all social institutions for higher efficiency.—The explanation of the current demand that normal schools standardize themselves would not be complete without reference to the general causes which are leading all over the country to surveys and careful examination of all kinds of educational institutions. Costs of educational organizations are so high and the volume of educational activity is so great that society is demanding as never before a reasonable accounting. In the meantime the scientific methods of studying educational results have been so far perfected that the inquiry into educational efficiency can be made most pointed. Normal schools can not longer be isolated, even if they will. Society at large is interested in them as in other institutions.

Systematic surveys of normal schools. Survey of Pennsylvania normal schools.—Systematic surveys of normal schools are few in number. In 1912, E. O. Holland¹ published the results of a careful study of the Pennsylvania normal schools. He describes the organization, entrance requirements, curriculum, examinations, student body, and faculty. The normal schools of Pennsylvania were at that time privately owned. Their entrance requirements were very low, demanding only elementary education of candidates for admission. The curriculum was elementary and administered with laxness. The examinations were perfunctory and excessively lenient. Holland makes it very clear that radical changes were imperatively demanded. Some of these changes have been made since the appearance of the report.

Survey of Wisconsin normal schools.—A second extensive survey was made by A. N. Farmer,² under the direction of the State Board of

¹ The Pennsylvania State Normal Schools and Public School System. By Ernest Otto Holland. Published by Teachers College, New York City, 1912.

² Conditions and Needs of Wisconsin Normal Schools. By A. N. Farmer. Issued by the State Board of Public Affairs, December, 1914. Democrat Printing Co., State Printer, Madison, Wis.

Public Affairs, of the normal schools of Wisconsin. This voluminous report contains a mass of details. It gives at great length extracts from reports and answers to questions. It presents in full recitations which were taken down by stenographers who visited normal classes for the purpose of reporting the recitation. In the appendix are tables giving the results of examinations of students, tables of costs, length of service, training of members of the faculties, and other matters. The body of the report gives an account of the organization and administration of the normal schools, the student body, the faculties, the training school, the course of study, and the mode of conducting instruction. There is a summary of findings placed at the beginning of the report.

History of the Wisconsin Normal-school system.—The Wisconsin system is one of the best-equipped and most highly centralized normal-school systems in the country. In his historical sketch former President Salisbury¹ has shown how this system grew up after repeated efforts to develop, in connection with the State university, such normal courses as the State needed. The present survey shows that there has been much confusion resulting from a division of interest within these schools between academic and normal courses. Furthermore, there are great variations in the administrations. There is evidently a marked preponderance of influence on the side of the president as contrasted with the faculties, and there is some evidence that standards are disregarded in the efforts to keep up numbers. In spite of the original close relation between the normal-training movement and the university, the present relation of the normal schools to the university is not clearly defined.

For the purposes of this report it will not be necessary to give any further account of the Wisconsin survey. The facts brought out in the later pages of this report confirm the impression made by the Wisconsin survey that there is almost entire lack of standardization of normal schools.

Statement by president of the Carnegie Foundation of the problem of teacher training.—It may be remarked in passing that the Carnegie Foundation is engaged in an extended survey of the normal schools of Missouri and Indiana, as set forth in the following extract from the report of 1914:²

For several years the Foundation has considered the desirability of conducting a systematic inquiry into the present status of the training of teachers for elementary, secondary, and vocational schools. This problem, of vastly greater import to the country at large than any other existing phase of instruction, has presented a continuous challenge and, as a whole, has defied manageable analysis.

¹Historical Sketch of Normal Instruction in Wisconsin. By Alfred Salisbury, 1893. Published in Whitewater, Wis.

²Ninth Annual Report of the President and of the Treasurer of the Carnegie Foundation for the Advancement of Teaching. 1914. Pp. 19-21.

The training of teachers in some form constitutes the capital factor in the success of what is financially and socially the major undertaking of every community. It is a problem of enormous bulk. At the same time it differs from the same problem in such professional fields as law, medicine, and engineering in that among elementary and secondary school teachers professional consciousness is nearly lacking. No organized group of teachers speaks, plans, or labors authoritatively for the profession as a whole. Such State or National associations as exist are huge, vaguely constituted aggregates, wholly lacking in definition of aim and membership. Under such conditions the real problems of the teacher can not focus sharply and be clearly understood by the teachers themselves in their collective capacity.

This lack of professional consciousness is due, undoubtedly, to the meager training usually required as well as to the casual and temporary nature of the employment under the conditions prevailing in America. All of these elements unite to place the teacher in marked dependence upon local provision and circumstance; individual initiative is discounted, and reliance is placed upon a more or less readily regulated "supply" of passive-minded instructors.

It is this localized character of the task of preparing teachers that has finally determined the form of the contribution which the Foundation hopes to make to this subject. Little by little the States of the Nation are realizing the oneness of the educational undertaking which faces them and are discovering that they can expect to cope successfully with it only by creating a skillful and mobile central authority to operate and control the entire undertaking. Of this great single educational enterprise in each State, the portion that is most vital, that overtops all else in its decisive importance, is that of selecting and training teachers. The solution of the State's problem as a whole is measured largely by the solution of this portion of the problem. It is emphatically a State task to-day and will doubtless permanently remain so.

It would seem most helpful, therefore, for the Foundation to approach the question from a standpoint as nearly as possible identical with that of the State itself. If it can succeed in a few States, or in one State, in appreciably illuminating the situation in its legislative, administrative, and institutional aspects, the results should prove of value not only for the particular State concerned but by analogy for all States possessing similar conditions.

This it hopes to do. The governors and the department of public instruction of two typical States of the Middle West, Indiana and Missouri, have invited the Foundation to examine the situation that exists with regard to the training and supply of teachers in their respective Commonwealths. To these formal invitations have been added many requests and pledges of cooperation on the part of local authorities in schools, colleges, and universities. With the assistance of the institutions and officials involved and of the teachers themselves, it is believed that facts of great importance can be brought together and certain questions answered that are fundamental to the successful administration of the States' school systems: What is the source, the nature, and extent of the general and professional training of the teachers to-day employed? What are the circumstances of age, sex, experience, and reward? What are the facts in respect to the annual supply required in the various grades of position? What is the degree of adjustment between training and service? How do present institutional agencies meet the apparent demand of the State in point of character of material, of quality of training, and quantity of product? What, finally, is the legislative and administrative background that conditions the State's present management of its problem? In all the above particulars, what is the historical perspective, and what is the strength of present tendencies?

From such a review and comparison of conditions there can scarcely fail to emerge numerous points at which the present procedure can be improved and strengthened. The opportunity also of making a precisely parallel study of two fairly similar State units should make the results especially helpful.

Vermont report.—The report of the Carnegie Foundation¹ on the State survey of Vermont, published in 1914, includes an account of the normal institutions of that State and a criticism of these institutions.

The studies of normal schools above referred to are made, it will be noted, by agencies which are external to the schools themselves. The authorities which have charge of the normal schools have been very slow in making the kind of study of their institutions which would define with clearness the place of these schools in the educational system.

Studies of State normal schools by local State officials.—Material for studies and in some cases detailed examinations of normal-school problems are given in a few State reports. Two of these reports will be described, namely, the one by State Supt. Morrison, of New Hampshire, for 1911-12, pages 135-158, and the one by Commissioner Snedden, of Massachusetts, for 1912-13, pages 17-36 and 188-194.

Each of these reports is an ideal survey; that is, it is an objective, precise study made by a thoroughly qualified educational expert, who is responsible for the best development of the whole educational situation under investigation. Hence he is sympathetically interested in the condition of the whole, but has no personal preference for any part.

Excellent report by State Supt. Morrison, of New Hampshire.—Supt. Morrison treats the following topics precisely; that is, in terms of exact, reliable statistics reduced to a percentage basis where desirable: The proportion of trained teachers in the State, the supply of trained teachers, the constituency of each of the existing normal schools (with maps), sections of the State at present unprovided for, the condition of the normal schools. This report is supplementary to similar studies made in other biennial reports, especially the one for 1907-8 and the last report for 1913-14.

Mr. Morrison writes that "the State has a comprehensive normal policy which contemplates the training of the entire teaching force of the elementary schools."

Excellent report by Commissioner Snedden, of Massachusetts.—In the Massachusetts report for 1912-13 Mr. Snedden devotes a chapter of 19 pages to discussion of the work of the normal schools of the State. He gives excellent historical and statistical tables, which show in usable, precise form almost all the information that any student of the situation might desire concerning enrollment, graduation, and com-

¹A Study of Education in Vermont. Prepared and published by the Carnegie Endowment for International Peace, Department of Teaching. Pp. 111-156.

parative per capita costs. He gives accounts of conferences of representatives of the 10 State normal schools and the State commissioner to consider "proposals for increasing the efficiency of the normal schools in training elementary school teachers." Six of these proposals are discussed. Extensive use will be made of Mr. Snedden's data in this bulletin.

Good statistical tables by Supt. Evans, of Missouri.—Among the State reports which contain thorough and useful statistical data, organized in common terms for comparative purposes, is that of Missouri for 1913, prepared by State Supt. Evans. On page 488 Supt. Evans gives for each of the five normal schools of the State the number of students of high-school rank and the number of college rank, further subdivided into first, second, third, and fourth year students in each of these ranks. For anyone who has tried to find out from ordinary reports just what the normal schools of such a State as Missouri are doing in the way of giving high-school and college training, this one page is very illuminating. It will be reproduced in a later chapter on numbers of students in the normal schools.

Other State reports.—Other useful State reports received were those of California, Idaho, Iowa, Michigan, Minnesota, Nebraska, New Jersey, North Dakota, Vermont, Virginia, and West Virginia. Some of these contain elaborate reports from the presidents of the various normal schools in the State, but little general interpretative and comparative treatment by a central State officer. Very often the report prepared by each normal-school president is so constructed as to give an impression of the bigness and importance of the school, instead of giving precise, reliable, objective data that can be readily used for comparative purposes. It would be well if all States would publish such usable and illuminating comparative reports as those of State Supts. Morrison and Evans and Commissioner Snedden.

Comparison of students of normal schools and colleges.—Reference may be made to special studies which have been useful in the present investigation. There is a study carried out by Mr. Shallies,¹ of the State Normal School of Plattsburg, N. Y., to determine the quality of students who enter the New York normal schools. Mr. Shallies secured from those high schools of New York which sent graduates to the normal school in the year 1908 a full record of all graduates. He then arranged these graduates in groups so as to be able to compare the group which went to the normal school with the group which went to college, the group which went into business, etc. The results of this comparison make it clear that students who enter the normal school are, on the average, of a lower grade than those who go to college.

¹The Distribution of High-School Graduates After Leaving School. G. W. Shallies. School Review, Vol. XXI (1913), pp. 81-91.

Certain other studies which have been made in particular matters are utilized in subsequent chapters of this monograph.

Meaning of the term "standardization."—These studies indicate that there are productive methods which can be employed in the study of normal schools. It is not the aim of this report to suggest that normal schools in different regions be made uniform. A normal school such as that in Milwaukee, Wis., drawing its students chiefly from that city and distributing its graduates for the most part into the city schools, is of necessity a very different school from the Kirksville (Mo.) Normal School, which draws its students from towns and villages and sends its graduates to rural and town schools. It may even be desirable to have wholly different types of entrance requirements and wholly different courses in two such institutions. If so, it is important that these needs be clearly defined and the standards of both schools be set up after deliberate scientific consideration.

The eastern normal school originated as a secondary school.—Again, there can be no doubt that the development of normal schools has been very different in different parts of the United States. In New England, New York, and Pennsylvania the normal school grew up as an institution of the rank of an academy. Indeed, in New York and Pennsylvania the normal classes were parts of the academies down to a late period. The result is that the eastern normal school seldom, if ever, strives to become a college. The courses are carried on to the entire satisfaction of faculty and State officers at the level of junior-college or high-school courses, and credit is, for the most part, not asked of the universities for this normal work.

Relation of western normal schools to universities.—In the Middle States a wholly different tradition arose. As indicated above, it was from the first regarded as a function of the University of Wisconsin to train teachers. The same is true wherever there are State universities. The university departments of education usually did not flourish, because the review courses which seemed to be needed did not seem to be of university grade, and there was not at that time scientific material for courses in the science of education. When normal schools grew up as separate institutions they were not academies as in the East, nor have they been recognized by the State universities as coordinate institutions. An example of the university's attitude is seen in the fact that the University of Michigan for a long time refused full credit to graduates of the State normal schools. The normal schools in many of the Western States, including Michigan, on the other hand, have not been satisfied to rank lower than the universities. They have the right to grant degrees and have been eager to exercise and enlarge this right. In the newer States the normal school has had the tradition of the college.

The uncertainty of purpose and organization has increased with growth of normal schools.—The western normal school has, on the other hand, in many cases made no effort to become a college. The kind of students which it could command and the urgency of the need which it had to supply have dictated a type of organization wholly different from that of the State university. The example of the New England normal school undoubtedly operated to make some of the western schools satisfied with high-school standards. Furthermore, the normal school has in some cases consciously accepted in sparsely settled or frontier communities standards of admission which were recognized as different from those of either the urban high schools or the State university. Thus confusion has grown and standards have been set aside in this development. It is now time to raise all of the questions at once and to seek an answer. Is the normal school to be of higher rank than the secondary school? Is it to be taken out of competition with the secondary school? Is it to be taken out of competition with the State university? In short, what is the place and what the legitimate work of the normal school?

This monograph merely outlines the problem of standardization of State normal schools.—One further comment is necessary in regard to the present report. The studies made have led to definite conclusions regarding the form of organization desirable in normal schools. It is evident that not all the possible facts have been canvassed. It is probable that some officers of normal institutions will not agree with the conclusions. It is emphatically to be urged that those who are not satisfied with the present work undertake the necessary amplifications of this study. The study aims merely to demonstrate the necessity of a broader investigation.

Finally, the limitations of this report may be further defined by the statement that this bulletin is restricted to a study of *State* normal schools. Some restriction of the scope of the study was necessary in order to simplify the problems and to secure a field in which comparisons could be ventured. This restriction eliminates a consideration of the work of closely related institutions, such as city training schools, county normal schools, and teachers' training courses in high schools. These institutions have been described, however, in other special bulletins issued by the Bureau of Education. County normal schools and teachers' courses in high schools are discussed in a bulletin by A. C. Monahan and R. H. Wright, entitled "Training Courses for Rural Teachers" (No. 2, 1913), and city training schools for teachers are described by Frank A. Manny in Bulletin No. 47, 1914.¹

¹ See also Bul. No. 48, 1914, "Efficiency and preparation of rural-school teachers," and Report of the Commissioner of Education, 1914, Vol. 1, pp. 1-116; 1915, Vol. 1, p. 82.

Chapter II.

STATISTICAL COMPARISON OF COLLEGES AND NORMAL SCHOOLS.

Relation of normal schools to colleges a vital problem in the North Central States.—One of the most vigorously discussed problems is that of the relation of the normal school to the college or university. As indicated in the preceding chapter, this problem comes to the surface for historical reasons especially in the States of the North Central territory. Here there are a number of normal schools which aim to take on full college or university standing. It is appropriate, therefore, in this territory to make a comparison between the normal schools and the other institutions which receive high-school graduates and continue their education.

The normal school has its special problems.—Lest the motives of the following study should be misunderstood, it should perhaps be explicitly stated that it is not assumed in this report that a normal school should pattern its organization after that of the college. It is merely pointed out that in certain respects normal schools and colleges differ fundamentally.

Report is based on returns from majority of schools.—This comparative study of certain normal schools and colleges is based on returns made to the North Central Association of Colleges and Secondary Schools. Table 1 shows the distribution by States of the normal schools included in this study:

TABLE 1.—State normal schools in various States considered, and number reporting to the North Central Association.

States.	Included in report of Commissioner of Education.	Reporting to North Central Association.
Colorado.....	2	1
Illinois.....	5	5
Indiana.....	1	1
Iowa.....	1	1
Kansas.....	3	3
Michigan.....	4	3
Minnesota.....	5	1
Missouri.....	5	4
Montana.....	1	1
Nebraska.....	4	2
North Dakota.....	3	2
Ohio.....	4	3
Oklahoma.....	6	3
South Dakota.....	4	2
Wisconsin.....	3	3
Wyoming.....	10	0
Total.....	56	35

¹ Included as part of the State university.

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Academic training of faculties.—The returns for both colleges and normal schools should show how many members of the faculties have advanced degrees. Table 2 gives the results for 63 colleges and universities on the approved list of the association for 1914 and 32 of the normal schools indicated in Table 1. The second column reports for the doctor's degree held by college faculties; the third column for the master's degree held by college faculties; the fourth and fifth columns for the normal faculties and the degrees of doctor and master, respectively. Thus the second column should be read as follows: There are two colleges which have less than 9 per cent of their faculty holding the doctor's degree. There are 11 institutions that have between 10 and 19 per cent, 16 that have between 20 and 29 per cent, and so on. The third column of the same table should be read as follows: There is 1 institution that has less than 9 per cent of its faculty with the master's degree; there is 1 institution that has between 10 and 19 per cent, and so on.

TABLE 2.—Advanced degrees held by members of faculties.

Percentage of faculty.	Colleges and universities.		Normal schools.	
	Ph. D. ¹	Master. ¹	Ph. D. ²	Master. ²
0 to 9.....	2	1	22	3
10 to 19.....	11	1	8	6
20 to 29.....	16	1	2	5
30 to 39.....	13	2	7	7
40 to 49.....	6	7	6	6
50 to 59.....	10	8	4	0
60 to 69.....	2	11	1	1
70 to 79.....	3	11		
80 to 89.....		15		
90 to 100.....				

¹ Nine not reporting.

² Three not reporting.

For colleges:

Average per cent of doctors.....	34
Average per cent of masters.....	67

For normal schools:

Average per cent of doctors.....	7
Average per cent of masters.....	31

This table makes it very clear that the academic qualification of normal faculties is very different from that of faculties of even the small colleges. It is not argued that university degrees should be required, but it is evident that normal schools must give heed to this sharp distinction when discussing the admission of their students to college with full credit for normal courses.

Sizes of normal faculties less than those of universities, but above those of most small colleges.—Table 3 shows the sizes of faculties, indicating the gross membership of these faculties. The table dis-

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tributes the institutions according to the increasing size of the faculties:

TABLE 3.—*Distribution of institutions according to size of faculty.*

Classes of institutions.	Number of members in faculty.													No report.		
	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	100 to 149	150 to 199	200 to 249	250 to 299		
Colleges and universities having numbers given.....	1	21	11	7	6	2	2	2	2	1	4	1	2	1	3	6
Normal schools having numbers given.....	1	9	5	9	4	3	2	0	0	1	0	0	0	0	0	1

This table shows that the normal school is to be classified as belonging, in general, with the small college in point of size. It is not equipped for instruction as is the great university. A few of the normal schools have reached the level of large colleges, as shown by the fact that one has a faculty of between 90 and 99, two between 60 and 69.

Normal-school faculties work many hours.—Table 3A, taken in connection with Table 3, reveals a fundamental difference in policy regarding the hours of service expected of members of the faculty. Each institution was asked to report the number of members of the faculty who have more than 18 hours a week of teaching. In the normal schools it is practically universal. Among the colleges and universities there are 36 which report no members of the faculty who work 18 hours. Where the colleges and universities report more than 18 hours, they usually qualify the report by stating that it is only officers in charge of shops or laboratories who have the long hours. In several normal schools all officers have the long hours.

TABLE 3A.—*Distribution of institutions showing number of officers who teach over 18 hours per week.*

Classes of institutions.	Number of members of faculty who teach more than 18 hours per week.										
	None.	1 to 4	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	No report.
Colleges and universities reporting numbers given.....	36	12	6	3	1	0	2	0	0	12	
Normal schools reporting numbers given.....	0	9	2	3	7	6	6	1	1	1	1

The table regarding hours of work is illuminating. It shows, in the first place, why candidates for teaching positions prefer to get into colleges. The hours of work in normal schools are much longer.

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In the second place, this table explains in large measure why the faculties of normal schools can not and do not carry on as much productive work. If normal schools are to help teachers in service to prepare courses of study and to test their results, they must have more leisure than they now have.

Salaries are good.—The average salaries paid to members of the faculty are set forth in Table 4.

TABLE 4.—Average salaries in North Central colleges and normal schools.

Salaries.	Universities and colleges.	Normal schools.	Salaries.	Universities and colleges.	Normal schools.
\$900 to \$999	1	1	\$1,600 to \$1,699	9	3
\$1,000 to \$1,099	3	1	\$1,700 to \$1,799	9	3
\$1,100 to \$1,199	4	1	\$1,800 to \$1,899	2	5
\$1,200 to \$1,299	2	2	\$1,900 to \$1,999	5	1
\$1,300 to \$1,399	0	1	\$2,000 to \$2,099	1	2
\$1,400 to \$1,499	7	5	\$2,100 and over	2	3
\$1,500 to \$1,599	6	3	No information	10	7

Material resources.—In general, as indicated in the table on average salaries, the material resources of the normal schools are very good. Direct comparison of capital is difficult, because most colleges depend on private endowments, while normal schools are supported by legislative grants. The following tables (Tables 5 and 6) give the facts, however, in a form which shows the satisfactory financing of normal schools. Table 5 shows the distribution of endowed institutions in the North Central States. This table does not include any normal school, but establishes a basis of comparison. The income from an endowment of \$250,000 is not likely to exceed \$15,000. The college is supported further, as the normal school is not, by tuition fees. All told, however, there are many colleges which have a gross income of less than \$50,000.

TABLE 5.—Productive endowment of colleges and endowed universities.

Endowment.	Institutions.	Endowment.	Institutions.
\$100,000 to \$149,000	1	\$400,000 to \$449,000	4
\$150,000 to \$199,000	0	\$450,000 to \$499,000	3
\$200,000 to \$249,000	10	\$500,000 to \$599,000	11
\$250,000 to \$299,000	4	\$1,000,000 and over	9
\$300,000 to \$349,000	2	No information	7
\$350,000 to \$399,000	0		

Table 6 compares the North Central normal schools with similarly located State institutions. Here it should be noted that there are usually several normal schools in a State, so that the aggregate expenditure on normal schools, when all normal institutions are con-

sidered, is much greater than the figures in Table 6 would at first sight indicate:

TABLE 6.—*Annual income of State-supported institutions in North Central States.*

Amount of income.	Universities.	Colleges of agriculture and mines.	Normal schools.
Less than \$25,000.....	0	2	.....
\$25,000 to \$49,000.....	0	3	6
\$50,000 to \$74,000.....	1	1	6
\$75,000 to \$99,000.....	0	0	5
\$100,000 to \$124,000.....	0	0	8
\$125,000 to \$149,000.....	0	0	3
\$150,000 to \$199,000.....	6	0	3
\$200,000 to \$249,000.....	1	1	0
\$250,000 to \$299,000.....	1	0	1
\$300,000 to \$399,000.....	0	0	0
\$400,000 to \$499,000.....	0	0	0
\$500,000 and over.....	3	0	3
No information.....			

Number of courses.—Table 7 shows how many courses are given in a year by the approved universities and colleges of the North Central Association and by the normal schools. The magnitude of the normal schools is made evident by this table.

TABLE 7.—*Number of courses given annually.*

Number of courses.	Universities and colleges.	Normal schools.
Less than 25.....		1
25 to 49.....	3	5
50 to 74.....	9	5
75 to 99.....	10	8
100 to 124.....	9	2
125 to 149.....	5	1
150 to 174.....	3	2
175 to 199.....	3	3
200 to 299.....	8	5
300 to 399.....	5	1
400 to 499.....	2	.....
500 and over.....	8	2
No information.....	7	

Ratio of faculty members to number of students.—One other item of internal organization may be made a subject of comment. The ratio of faculty members to students is about the same in normal schools and colleges, as shown by Table 8. The organization of normal schools is seen to be like in kind to that of the colleges.

COMPARISON OF COLLEGES AND NORMAL SCHOOLS.

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TABLE 8.—*Distribution of institutions according to ratio of faculty members to students.*

Students per faculty member.	Universities and colleges.	Normal schools.
0 to 4.9.		
5 to 6.9.	2	2
7 to 8.9.	3	
9 to 10.9.		
11 to 12.9.	11	3
13 to 14.9.	11	2
15 to 16.9.	14	3
17 to 18.9.	10	8
19 to 20.9.	5	4
21 to 22.9.	6	1
23 to 24.9.	3	1
25 to 29.9.		2
30 to 39.9.	4	
40 to 49.9.		2
50 to 59.9.	1	
No information.	2	6

Summarizing this comparative study, it may be said that in material resources, in number of courses, and in ratio of faculty to students, normal schools are directly comparable to selected lists of universities and colleges. In training of the faculty and in the tasks imposed on faculty members, normal schools suffer seriously in comparison to colleges.

Chapter III.

PURPOSE, NUMBER, AND GEOGRAPHICAL DISTRIBUTION OF SERVICES OF STATE NORMAL SCHOOLS.

Normal schools exist for the State, not for the students.—To a student of American normal schools the first broad questions which arise concern the *purposes* of these schools, the *number* of schools maintained in each State, and the *geographical distribution of the services* of the schools within a State. These three items are intimately related. An excellent expression of the relationship is contained in the following quotation from the report of State Supt. Morrison, of New Hampshire, for 1911-12, page 151. After discussing the possible location for new normal schools in the State, he says:

It will perhaps be recognized that the foregoing discussion is all based upon the theory that normal schools exist for the State and not the reverse. * * * They are not established primarily to afford opportunities to young women who aspire to teach, but rather for the purpose of furnishing trained teachers for the common schools. Their establishment becomes purely a matter of finding ways in which they can serve this purpose to the best and most economical effect. No community has any claim upon the State for the location of a new school within its limits. Every school should be so located as to provide the best prospect of enabling a section of the State to educate and train its own teachers.

Almost the same statement occurs in the report of Commissioner Snedden, of Massachusetts, who says (1912-13, p. 74):

The normal schools do not exist for the sake of the young people whom they educate; they were organized for the purpose of training teachers for the public schools. Their further development must be controlled by considerations as to what will prove the most effective and most economic means of training an adequate supply of teachers for the Commonwealth as a whole.

This standard applies in settling all normal-school issues.—It might seem to some readers unnecessary to reiterate the point of view expressed in these two quotations, but, as a matter of fact, in almost every State it is necessary to keep constantly in mind this idea of securing the most effective and economic means of training teachers for the whole State, in order to combat local influences and ambitions and to avoid the waste of State funds.

Determining the location for new normal schools; four factors.—There are many instances of normal schools which have been un-

fortunately located, owing to lack of foresight or to the temporary strength of local political influences, and these unfortunate locations are not infrequently referred to and discussed by State authorities who take an objective view of the needs of the whole State. Among the most important considerations in locating most normal schools are the following: (1) Each one should be so located as to serve a well-defined area of population. (2) It should be centrally located in the area, which usually should have a radius of about 50 miles from the normal school as a center. (3) It should be located in the most convenient railroad center in this area. (4) It should be located in a town large enough to provide more than adequate practice-teaching facilities for any number of teachers that the area might need at any time in the future.

Balancing of these factors usually needed.—Needless to say, not all these conditions could be completely satisfied in locating every normal school. Number 2 must often be violated when there is a large metropolitan area located on the edge of a State. In such a case, however, the location of the school on the edge of the area is usually compensated for by the fact that the city is an excellent railroad center.

Unfortunate location of normal schools in small towns.—All these conditions have been violated in the establishment of some normal schools. In fact, it is not uncommon in normal-school catalogues to find idealized descriptions of the location of the school in question in a small town far from the distractions and temptations of city life. While this monastic seclusion may have some obvious advantages, the disadvantages of such a location for a school that is to serve a large area of the State most economically and effectively are of much greater importance. Sometimes a State normal school which is supposed to serve a large, well-populated area is located in a town of only 2,000 to 5,000 population on a single railroad, when only a few miles away is a city of over 20,000 located on several railroads.

Critical study of normal-school zones of New Hampshire.—An excellent discussion of the above conditions as they determine the location of new normal schools in a single State—New Hampshire—is found in Supt. Morrison's report for 1911-12, pages 141-151. The accompanying map shows the two zones from which the two existing normal schools draw most of their students.

Poor location of the Plymouth school.—The long irregular zone running up along certain railroad lines in the middle of the map is inadequately served by the Plymouth Normal School, as shown in the following quotation (p. 144):

In connection with Plymouth, it should be said that the school can not possibly fully serve the zone from which it now draws students. Twenty per cent

of the Plymouth enrollment at present comes from the city of Manchester alone. The zone contains five cities, three of them the largest, in order, in the State, besides a number of large towns, something like two-fifths of the entire population of the State. Now, Plymouth is up to its maximum enrollment. No amount of building or physical enlargement of the school can provide model and practice schools, which are the vitals of successful normal-school work. The trustees at present limit the enrollment to 150. But even this is much too large for the most effective work.

Better location of the Keene school.—On the other hand, the normal school at Keene, N. H., is better located to serve its constituency. The contrast with the poor location of Plymouth is brought out in the following quotation (p. 146) :

The Keene zone, as will be seen, is much more normal in type—that is, it approaches more nearly the character of a circle with a school at its center. As a result, its work for the State will probably always be more intensive. I mean by that that it will tend to have some students from every town in its territory. This zone requires annually about 90 teachers without previous experience. We can without any great exercise of the imagination see the school providing this number annually. Hence we can safely say that it is merely a question of time when a section of the State southwest of a line drawn between Nashua and Claremont can provide itself with teaching forces composed exclusively of trained teachers.

The Keene school can train an enrollment of 480 as easily and as well as Plymouth can train an enrollment of 150. There is model and practice material enough there for the purpose. An enrollment of 250 students under training would suffice for the needs of that section of the State.

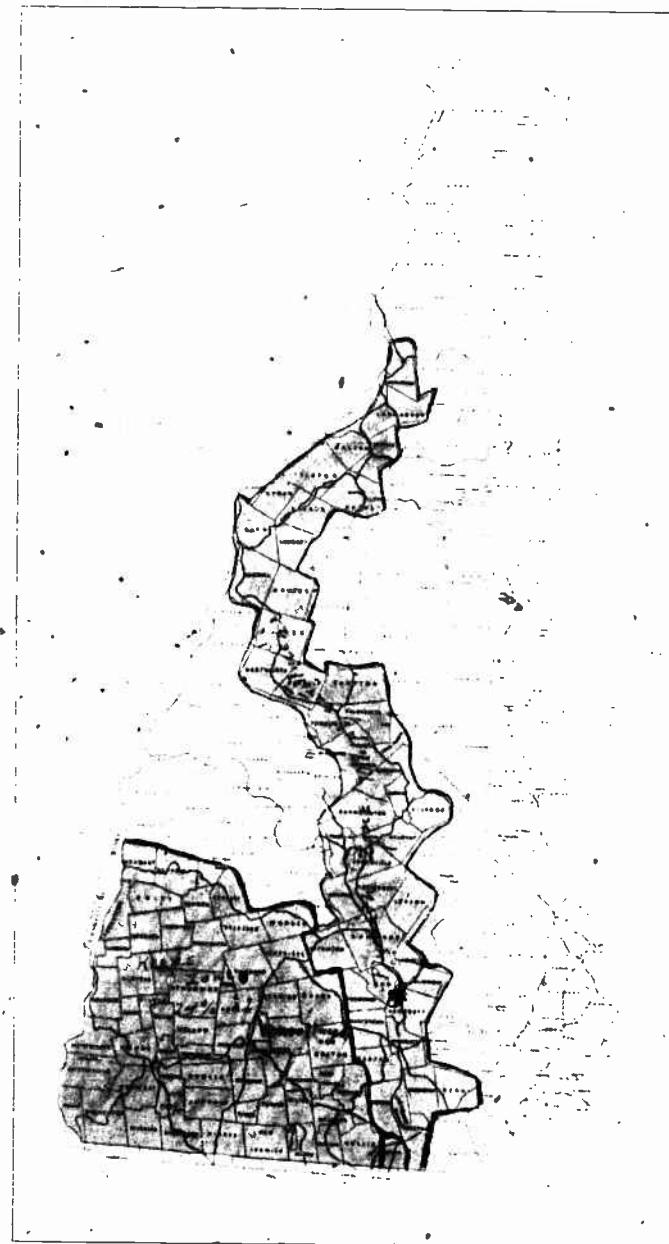
Description of location of a well-located normal school.—In compiling this bulletin an attempt was made to secure from the president of a well-located normal school the data to fill in the blanks in the following. The data were not forthcoming, however. In lieu of them, the paragraph is printed with blank spaces which any normal-school president can fill in for his school and ascertain if the story which the paragraph then tells is satisfactory from the standpoint of the possibilities of the school rendering large service:

An example of a — (well or poorly) located normal school is the one at —. (1) The zone which it serves contains a population of — and needs approximately — new teachers for town schools and — new teachers for rural schools annually. (2) The town is — centrally located in the area, as will be seen from the accompanying map. The average radius from the town to the edge of its normal-school area is approximately — miles. (3) — steam and electric railroads place the city in direct communication with — parts of the area. (4) The city has — thousand children in its public schools, which assures adequate (or inadequate) practice facilities for — years to come.

Number of normal schools in a State. Each section must train its own teachers.—Closely related to the geographical distribution of the services of State normal schools is the number maintained by a given State. Logically, since the purpose of the State normal schools is to

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ZONES IN NEW HAMPSHIRE FROM WHICH THE TWO STATE NORMAL SCHOOLS DRAW THE BULK OF THEIR STUDENTS.

train teachers for the *whole* State, the number of schools established should be determined by this consideration. As soon as one begins to study the question from this point of view, he meets the "well-established principle that all higher educational institutions draw their students largely from within a radius of comparatively few miles." A corollary of this principle as applied to normal schools is that "in the long run, each community has to raise as many teachers as it needs." Furthermore, the services of a normal school to the different parts of the community diminish rapidly as one travels away from the center where it is located.

Distribution of students when only one State normal school is maintained.—One of the best illustrations of this fact is the accompanying map, reproduced from the catalogue of the State Normal School at Terre Haute, Ind. The latter is one of the few well-developed States that maintains only one State normal school. It would appear from the map that the county in which the school is located and the immediately surrounding tier of counties receive 29 per cent of the services of the school, although they include only 7 per cent of the population of the State. Even if the county in which the school is located be omitted (since many persons move into the normal-school town to educate their children), it is found that the immediately surrounding tier of counties receives 12 per cent of the services of the State school, although these counties include only 4 per cent of the population of the State. In other words, the region in which the school is located receives from the State funds three to four times the amount of service to which it is entitled on the basis of the population of the region. The data on which these calculations are based are shown in the accompanying table.

Proportionate representation of neighboring counties and the whole State in the Terre Haute (Ind.) State Normal School.¹

Region.	Population, 1910.	Per cent population, 1910.	Students in normal.	Per cent students.
State.....	3,700,876	100.0	8,855	100.0
State, except Vigo and contiguous counties.....	3,605,988	92.8	2,729	70.8
Vigo and contiguous counties.....	105,088	7.2	1,126	29.2
Vigo County, east of normal.....	87,930	5.3	651	16.0
Aggregate of all counties contiguous to Vigo County.....	106,088	5.9	475	12.3
Counties contiguous to Vigo County, in detail:				
Vermillion County.....	15,846	.7	82	1.1
Perry County.....	23,214	.8	60	2.4
Clay County.....	23,525	1.3	136	1.5
Sullivan County.....	23,430	1.3	176	4.6

¹ Terre Haute is located in Vigo County.

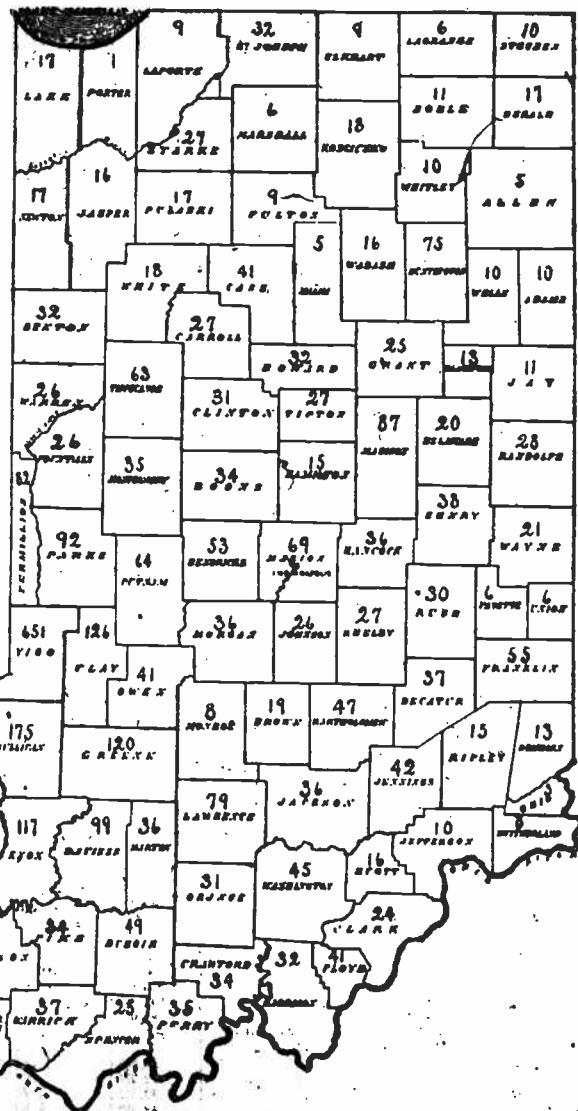


FIG. 1. Geographical distribution of students in Indiana State Normal School, Terre Haute, Vigo County.

Students in the Indiana State Normal School per 1,000 population.

For the State as a whole.....	1.4
For State except Vigo and contiguous counties.....	1.1
For Vigo and contiguous counties.....	5.8
Vigo County.....	7.4
Aggregate of all counties contiguous to Vigo.....	4.5
Counties contiguous to Vigo, in detail:	
Parke County.....	4.2
Clay County.....	3.9
Sullivan County.....	5.4
Vermillion County.....	4.4

For every 1,000 population Vigo and contiguous counties send to the State Normal School 5.3 students for every 1 from the rest of the State.

Few normal graduates in sections remote from normal schools.—Further evidence concerning the tendency of a normal school to fail to serve areas of the State remote from it is contained in the extracts given below from letters received by State Supt. Kendall from teachers in the southern part of New Jersey who were high-school graduates, but had not attended normal school. In discussing the situation Mr. Kendall says: "The fact is that the State has not done its duty to the children in that section, because it has failed to provide adequate facilities for the training of teachers." The following quotations from letters are typical (report for 1913, pp. 132-133):

"I do think if there had been a normal school nearer, so I could have gone with less expense attached, I would have been a normal graduate to-day."

"The reason I did not attend was because of the cost and inconvenience. Had there been a normal school nearer home, no doubt I should have attended such."

"The only reason why I did not enter a normal school was because of the overcrowded conditions at the State Normal School at Trenton, and I could not enter until the following term after sending in my application."

"The only reason for my not attending the normal school was the expense, on account of the normal school being too far from my home."

"I would have been only too glad of the opportunity to attend a normal school had there been one near at hand. Furthermore, this fall I tried to have my sister enrolled as a student at the Trenton Normal School, but there was no room for her. The same condition prevailed at Montclair. I was disappointed, for I wanted her to attend a New Jersey normal school."

"Had there been a normal school in our vicinity when I graduated from high school, I should have been glad to take advantage of the opportunity."

Data showing number of State normal schools in each State.—In view of such facts most States have endeavored to meet the needs of all sections by establishing two or more State normal schools to serve definite areas. The number of State normal schools maintained in each State is shown below. Similar data are shown on the map on page 29.

Number of State normal schools in each State.

Alabama	7	Maryland	8	Oklahoma	7
Arizona	2	Massachusetts	10	Oregon	1
Arkansas	2	Michigan	4	Pennsylvania	18
California	8	Minnesota	5	Rhode Island	1
Colorado	2	Mississippi	1	South Carolina	2
Connecticut	4	Missouri	6	South Dakota	4
Florida	1	Montana	1	Tennessee	4
Georgia	8	Nebraska	4	Texas	5
Idaho	2	Nevada	1	Utah	1
Illinois	5	New Hampshire	2	Vermont	2
Indiana	1	New Jersey	3	Virginia	5
Iowa	1	New Mexico	2	Washington	8
Kansas	3	New York	11	West Virginia	7
Kentucky	8	North Carolina	7	Wisconsin	9
Louisiana	1	North Dakota	4	Wyoming	1
Maine	6	Ohio	4		

Uneconomical to maintain very small schools.—The multiplication of normal schools to serve the several districts of the State has, however, certain disadvantages when carried too far. These disadvantages are those which result from the maintenance of a number of very small schools, instead of a few which are large enough to permit the economical development of adequate equipment and the economical employment of an adequate faculty. It is necessary to balance these factors against the arrangements for localizing the services of the normal schools in order to determine the number of schools that any State ought to undertake to maintain.

Disadvantages illustrated in Massachusetts.—Some of the disadvantages of organizing too many schools are discussed by Commissioner Snedden, of Massachusetts, a State which maintains 10 normal schools. He says (Report, 1912-13, pp. 72-73):

In proportion to population, and especially in proportion to area, Massachusetts has more (separate) normal schools than any other State in the Union. As one result the State has a larger proportion of trained teachers in the public schools than any other State; as another, opportunity for normal-school attendance is easily possible to a large majority of the residents of the State, even in the case of pupils desiring to attend as day students.

But there are disadvantages connected with this multiplicity of normal schools. Each school must offer a rounded program of professional instruction with proper specialization of work on the part of instructors. Hence the per capita expenditure of a small school is necessarily large. Again, because of the small size of each of the normal schools in the State, it is not practicable to pay to heads of departments salaries equal to those offered in other States which have larger normal schools. The result is that for many years Massachusetts has been steadily losing its most expert normal-school teachers. The maximum salaries paid teachers in the Massachusetts normal schools are: To women,

* State colleges for teachers counted as normal schools.

† Includes normal schools organized as part of a State college or university.

\$1,500; to men, until recently \$2,800 and now \$2,500; but larger schools in other States pay as much as \$2,000 to women and \$3,000 to men, as heads of departments. The overhead and administration charges for a small school are invariably larger in proportion to attendance than for a large school.

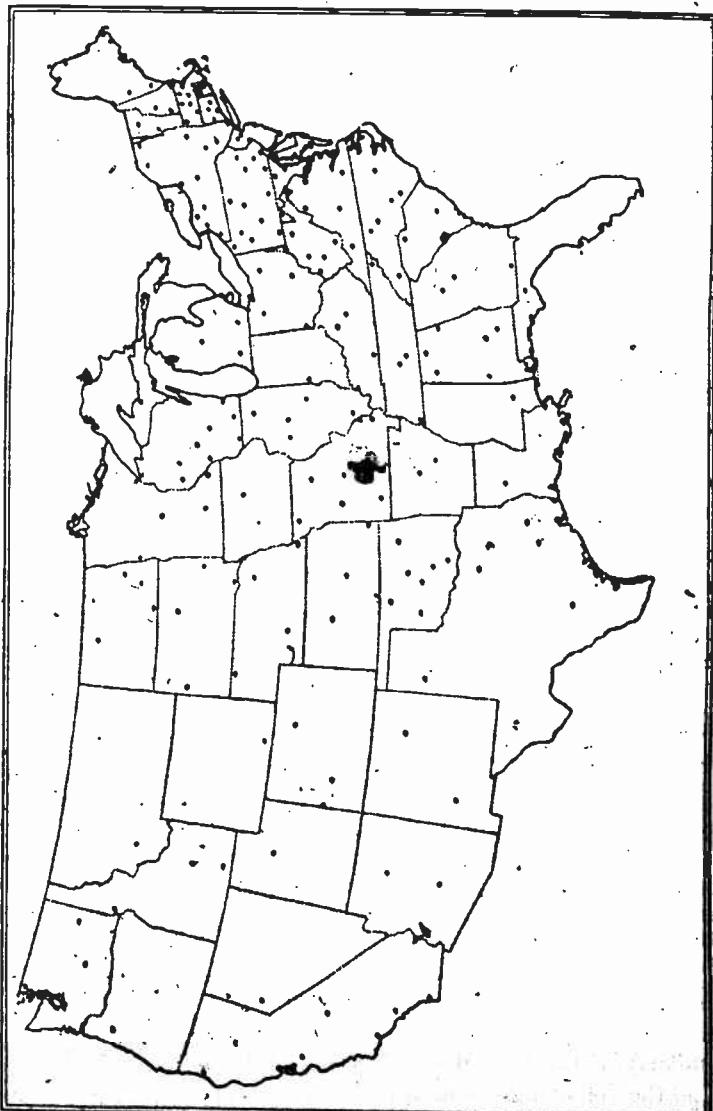


FIG. 2.—Distribution of State normal schools.

A more detailed discussion of the larger per capita expense of maintaining small normal schools will be given in later chapters.

Instruction deteriorates in overcrowded normal schools; Limiting the attendance.—In some States the normal schools quickly outgrow

their facilities. In some such cases the schools continue to try to take care of all comers, with resulting deterioration in the quality of the instruction provided. Other States place limits on the number of students that may be accommodated in the schools. In order to keep the schools from being filled up entirely by students from the immediate vicinity, an equitable allotment of students to the several counties in the normal school district is sometimes provided. The effect of both of these arrangements is seen in the following excerpt from the report of the principal of the Trenton (N. J.) State Normal School. He says (An. Rep. State Bd. of Ed., 1913, p. 439):

We took for the year a larger enrollment than we really should have taken, considering the size of our building and the number of our teachers, and yet we were not able to receive more than half of those who wished to come. The provision of the law that secures the rights of the more distant counties to their proportion of the enrollment is wise, but it is especially hard that those living near us can not all be received.

Railroad fares of students paid in a few States.—In a very few cases the disadvantages of communities located at some distance from a State normal school are balanced by the payment of the railroad fares of students. For example, in the 1913 report of the board of trustees of the Rhode Island State Normal School (p. 10) we find the following paragraph:

Students' mileage and car fares.—Obviously to promote, in some degree, an equality of opportunity among students of the Normal School residing in different parts of the State, an annual appropriation for mileage has been made by the general assembly since 1871. The first appropriation of \$1,500 was increased to \$2,000 in 1896, to \$3,000 in 1900, and to \$4,000 in 1902. The appropriation for mileage is apportioned among students who reside farther from the Normal School than a distance practically indicated by a car fare of 5 cents, according to the distance traveled and the number of days of attendance. Though there has been a large increase in the number of students, there has been no increase since 1902 in the amount of mileage annually appropriated by the general assembly. The trustees, however, have found it essential, in view of the extension of the system of training schools to different parts of the State, to provide, from the general appropriation for the school, car fares for student teachers in cases not covered by mileage. Though not perhaps a pressing need, an increase in the amount allowed for mileage would prove of pronounced advantage.

This paragraph is followed in the Rhode Island report by 12 rules governing the apportionment of mileage and car fares.

Similarly, in the New Mexico Normal University bulletin for 1914, we find the following paragraph:

Railroad fare.—A student that will sign a declaration of residence in New Mexico and an intent to teach in New Mexico may have railroad fare, less \$3, returned after eight weeks' attendance at the Normal University. Students must travel over shortest practicable route. Take a receipt for every ticket you buy.

Maintenance of normal schools usually parallels general educational policy of a State.—In most States the establishment of normal schools has paralleled the general educational conditions and educational policies of the State. Consequently, in States like Massachusetts, New York, Michigan, Wisconsin, and California, we find strong normal-school systems. In other States such as some of those in the South, the development of normal schools has been retarded, paralleling in this respect the development of general educational conditions. The recent intense revival of educational progress in these sections, however, is generally paralleled by similar interest in normal-school education.

Exceptions.—In a few States the adequate development of State normal schools was retarded for a long time even though the general educational conditions were fairly good or even excellent. Examples of such States are Pennsylvania, Ohio, Indiana, and Iowa. In some of these cases one important factor in retarding the development of adequate public normal schools was the existence of a large number of private and denominational colleges or normal schools. In the Report of the Commissioner of Education for 1912 Ohio is shown to have some 37 such colleges; Pennsylvania has practically the same number and until recently had in addition about 13 private (but so-called "State") normal schools, the latter receiving State aid. Iowa has only about 22 private and denominational colleges in the list and Indiana only 17, but in each of these States a single powerful State normal school is an additional factor to be considered in determining why these highly developed States have relatively inadequate State normal-school facilities for many parts of the States. The situation in Pennsylvania was thoroughly described in the study by E. O. Holland, in 1912, which was referred to above on page 9. About the time that this study was published, reforms in the administration of the so-called State normal schools were begun, which will probably eventually result in these schools serving the purposes of the State as State normal schools do in most places. In Ohio two State normal schools were opened in 1902, but grew very slowly, owing to the fact that private-school interests opposed the development of an adequate scheme for granting teachers' certificates to the graduates of the State schools. These difficulties were eventually overcome, however. Moreover, the State recently opened two new State normal schools. Indiana still has only one State normal school, but several very powerful private normal schools or colleges. From the list in the Report of the Commissioner of Education for 1912, it would appear that the State of Iowa has no State normal school, but this is merely due to the fact that the institution at Cedar Falls is now ranked as a State teachers' college; hence it appears in the list of colleges instead of normal schools.

Chapter IV.

THE ADMINISTRATIVE CONTROL OF STATE NORMAL SCHOOLS.

Control to be determined by purpose of serving the State.—Since the purpose of a State normal-school system is to serve the whole State in the training of teachers, the question of the administrative control of the State schools in the interests of the State is of vital importance. The issues which arise in determining the best type of control are the same as arise in the case of any other State educational institutions. The problems are somewhat simpler, however, in the case of normal schools, because the purposes of these schools may be clearly defined and restricted, namely, to training teachers for the public schools of the State. Since the number and kind of teachers needed in each State can be very easily and very definitely determined, the larger outlines of the tasks of the normal schools can also be easily drawn. Consequently there should be less scope for variation in opinion concerning normal-school policies than concerning the policies of other educational institutions. As a matter of fact, however, there exists a great variety among the different States. These forms of control will be discussed in this chapter in two sections. The first section contains some of the results of an elaborate inquiry conducted by Mr. D. R. Henry during the spring of 1915 by means of correspondence with State educational officials and normal-school presidents and by an examination of the latest available printed State codes of school laws. The second section contains an interpretative discussion by the authors of the bulletin.

Section I. A STUDY OF STATE NORMAL SCHOOL CONTROL.

By D. R. HENRY, Superintendent of Schools, Jerseyville, Ill.

Types of control.—Though the systems of control in State normal school systems differ in details, there seem to be four clearly defined types. These are:

I. The type in which the authority to control is vested in a separate local board of trustees for each normal school. Examples of this type of control are Arizona, Georgia, Illinois, Indiana, Missouri, New Mexico, North Carolina, Ohio, Pennsylvania, and Washington. In

practically all cases there are ex officio members on these boards who serve to connect the local and State control.

II. The type in which the authority to control is vested with a State board of normal school trustees or a State board of education which has supervision of normal schools, but of no other educational activities in the State. In Alabama, Arkansas, Maine, Michigan, Minnesota, Mississippi, Nebraska, New Hampshire, South Carolina, Virginia, and Wisconsin the State normal schools are placed under the management of such a State board. The members of these boards are usually chosen from various parts of the State. To insure a representative body, many of the States have passed measures relating to the political, residential, and sex qualifications of members. For example, the Minnesota law provides that "there shall be one director resident in each county in which a normal school is located, and no two shall be residents of the same county." Some States determine the number by congressional district.

III. The type in which the control is vested in a State body usually termed board of education or board of regents which controls at the same time other educational activities in the State. Examples of this type of control are Connecticut, Idaho, Iowa, Kansas, Maryland, Massachusetts, New Jersey, New York, North Dakota, Oklahoma, South Dakota, and Tennessee. The authority in this type rests with this State board as the administrative head of the State school system or of the higher institutions. The titles of the body are somewhat confusing. For example, the functions of the Iowa State Board of Education are limited to State institutions of higher education. In New York the State board of regents is the administrative head of the public school system, acting in all matters not in conflict with statutes.

IV. The type in which there is a dual or cooperative scheme of control. This type of control is less common and fewer examples can be offered. Though the dual characteristic is common to all of these examples, the following cases will show that they vary considerably in detail. Montana has a State board of education in charge of all State educational institutions. As relates to State normal school control, there is also a local board of trustees consisting of three members, two appointed by the governor and the president of the normal school serving as ex officio chairman. In theory the State board has general control and delegates such powers to the local board as it sees fit. California until recently has offered another peculiar system of control. A board of trustees was over each school, and paralleling somewhat the Montana State board was a "Joint Board of State Normal School Trustees" composed of the governor, the superintendent of public instruction, and the presidents of the State normal school boards. The joint board has been

abolished by the recent session of the legislature, and its powers have been lodged in the State board of education. Kentucky still retains a similar type of control. A local board of regents has general control and management of a normal school, adopting needful rules and regulations, appointing or dismissing officers, fixing compensation, etc., while the duty of the "Normal Executive Council" is to "prescribe the course of study to be taught in each State normal school and the educational qualifications for admission to and graduation from the same." The council is composed of the State superintendent of public instruction and the "head executive" of each State normal school. West Virginia offers a typically dual type of administration. The State normal schools are under the management of two State bodies, the "State board of regents" and the "State board of control." The former board consists of four members appointed by the governor and the State superintendent of public instruction. The State board of control is composed of three members, all appointed by the governor. It is to be noted that the State board of control is in charge of the *business* management of the State normal schools, while the board of regents is the *administrative* head in all educational matters.

In theory New York has the State-local type of control. Local boards of "not less than 3 nor more than 13" members are placed over each of the 10 State normal schools. As was stated in a paragraph above, the State board of regents is actually the administrative head of the public-school system. The local boards are purely advisory bodies and their local management is subject to the commissioner of education and the board of regents. In commenting on the place of the local boards Mr. Thomas E. Finegan says:

Local boards were established when these institutions were first organized and before the State board of regents had general supervision of all educational matters throughout the State. Since the educational work of the State was unified and the State board of regents was made the general legislative educational body of the State, there is not the reason for local boards in charge of educational institutions that previously existed. You will readily understand, however, how difficult it is to abolish local boards after they have once been established.

Appointment, tenure, and size of boards.—The following methods of appointment were noted: Appointment by governor; by governor, with confirmation of one of the houses; by governor, with approval of both houses; by legislature; by State board of education; and by popular vote. The predominant method is to recognize the governor as the executive head of the State and the one responsible to the public, and to check the arbitrary exercise of the appointing power by requiring confirmation by the legislative department of the State government and specifying certain qualifications. South Carolina

and New York place appointment with the legislature, in Pennsylvania the State board of education appoints, and Michigan makes it a matter for popular vote.

The tenure varies from 2 years in Connecticut to 12 in New York. In Massachusetts and Pennsylvania the term is 3 years; in California, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota, New Mexico, and Virginia, 4 years; in Idaho, Nebraska, New Hampshire, Ohio, and Wisconsin, 5 years; in Alabama, Colorado, Iowa, Maryland, Michigan, Mississippi, Missouri, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, and Texas, 6 years; in Arkansas, 7 years; in New Jersey, 8 years; and in New York, 12 years. A 6-year term is most prevalent, with 4 and 5 following in order. The term of *ex officio* members is, of course, determined in some other way and is usually 2 or 4 years. One, two, or three members are usually appointed annually or at each regular session of the legislature and retire accordingly in the same way. In some States one member is appointed annually. In such case the number of members and the tenure must necessarily be the same. New York is a good example of the method of appointment. There are at present 12 members of the State board of regents, 1 member being chosen from each of the nine judicial districts of the State and 3 from the State at large. Members are elected by a joint ballot of the State legislature. The term of office is 12 years, 1 member being elected annually.

In regard to size, the tendency seems to be toward a board of from 5 to 9 members. Arizona, Kansas, and Washington have small boards of 3 members, while the boards of Georgia vary from 9 to 20 members. Michigan has a board of 4 members; Illinois, Indiana, Maine, New Mexico, North Dakota, and South Dakota have 5; Idaho and Texas, 6; Colorado, Connecticut, Missouri, Nebraska, New Hampshire, and Oklahoma, 7; Alabama, Arkansas, Maryland, and New Jersey, 8; Iowa, Massachusetts, Minnesota, Oregon, and Tennessee, 9; South Carolina and Wisconsin, 11; New York and Virginia, 12. Small boards are usually *ex officio*, but the Kansas State board of administration is an exception. The law specifies no qualifications. The board at present is composed of E. T. Hackney, a lawyer; E. W. Hoch, ex-governor and editor; and Mrs. Cora G. Lewis. They give their entire time to the work and receive an annual salary of \$3,500 each.

Qualifications of members of boards; the data concerning qualifications.—An examination of data under this head reveals that few States specify qualifications for board members other than the restrictions relative to residence, political party, sex, and relationship to institutions. Later legislation reveals a tendency toward the selection of a board composed of persons who are somewhat prepared for the work they are to do. Indiana and Ohio merely provide that their boards shall be composed of "competent persons," but Iowa

law specifies that "they shall be selected solely with regard to their qualifications and fitness to discharge the duties of the position." Oklahoma is more specific, and requires that two of the appointive members shall be practical school men who shall have had at least four years' experience in actual school work, two years of which shall have been in the State of Oklahoma. South Dakota laws contain the following provision: "They shall be persons of probity and wisdom and selected among the best and best-known citizens." The Maryland law requires that "members must be of high character, integrity, and capacity." The North Dakota (1915) legislation provides that the State board of regents "shall consist of five members, all of whom shall be equally qualified electors and taxpayers of the State, appointed for their fitness and ability to efficiently serve the people of the State in such capacity." Under this provision the board is composed of two business men and farmers, a lawyer, a former governor and business man, and a physician. The Iowa board shows the following composition: Lawyer, editor, engineer and contractor, two bankers, and a merchant and banker. This board selects from outside its own membership a committee of three, called the finance committee. This body has charge of all the financial transactions of the institutions under the management of the board. According to Mr. W. H. Gemmill, the secretary of the State board, the finance committee performs the executive functions of the board, and in reality is "the eyes and ears of the board." This committee was formerly composed of two editors and Mr. Gemmill, who was superintendent of schools at Carroll, Iowa. Of course the members of the finance committee devote their entire time to committee work. A discussion of the composition of these boards is not offered to prove that the bodies in these States are of higher character than in those where no qualifications are required. The distinctive feature is that they are chosen to perform a definite function and are compensated for it.

Opinions concerning value of types of control.—Letters were addressed to a number of State educational officers and normal-school presidents requesting statements of their opinions concerning the best type of normal-school control. Naturally, most of the replies contained statements approving of the form of control now existing in the State in question. The reasons given for this approval are often illuminating, however, and valuable comparisons between several States are often included in these replies, a number of which are quoted, in part, below.

Principal J. M. Green, of the Trenton (N. J.) State Normal Schools, concludes, "I am of the opinion that it is an advantage to have all the State normal schools of the State under one board."

Mr. W. H. Gemmill, secretary of the Iowa State Board of Education, writes:

While the single board of education for the management of the State educational institutions has been in existence only a few years, yet I assure you that the results already secured have far exceeded the expectations of the framers of the measure. The people of this State are convinced that the statute is a wise one, and the State board of education has the confidence and support of the leading people among all classes.

President G. E. Maxwell, of the Winona State Normal School, of Winona, Minn., summarizes the advantage of control by a single State board for normal schools in this paragraph:-

Our unit board for all normal schools has proved a very excellent arrangement. It serves to bring a well-conceived and harmonious budget to the legislature, which has not failed in several sessions to appropriate every cent asked for. It unifies the schools, prevents unsafe and disorganizing forms of competition for students, maintains uniformity of standards of admission, instruction, and graduation.

President John H. Keith, of the State Normal School at Oshkosh, Wis., says:

My judgment is that the single board for the control of the normal schools of the State works out very effectively. I had formerly been used to a board for each school, as in Illinois. There are, of course, certain advantages in having a board of trustees for each school. There are also certain disadvantages. My judgment is that the single board for all normal schools of the State is preferable.

Mr. Keith adds this comment:

Perhaps the greatest merit of the system as it has appeared in Wisconsin is that the normal schools have not had to take any backward step. A nonpaid, nonexpert board has to be convinced that a proposal meets a social need and that it is a wise, sensible method of meeting it. When the board is thus convinced, mistakes are infrequent.

President Charles McKenny, of the Ypsilanti (Mich.) State Normal, says:

In comparing the administration of Michigan normal schools with that of other States, I think I am warranted in saying that the administration of the State board has been relatively efficient.

The Michigan State board is peculiar in that it has only four members and is elected by popular vote. In regard to the latter feature Mr. McKenny comments:

I am inclined to think from observation in Michigan and Wisconsin that, so far as these two States are concerned, at least as good a quality of men has been chosen by popular election for regents of the university and for members of the State board of education in Michigan as was appointed by the governor of Wisconsin to similar boards. * * * While theoretically a board of four is not ideal, as there is always a possibility of a deadlock, the practical working out of the problem in Michigan for the past 15 years has been in all respects creditable.

A criticism of unit control is made by Principal H. H. Roberts, of the Las Vegas (N. Mex.) Normal University. Mr. Roberts states:

For the past five years this institution has been practically governed by the president. The board of regents meets from time to time to pass upon his recommendations, but each employee is employed and dismissed with the full assurance that his actions would be approved by the regents. Previous to that the board attempted to govern everything. Since the new régime the school has grown from 227 pupils for the nine months to practically 400, and the summer school from 69 to 430. I am convinced that the less the board has to do with the operations of a school the better it is for the school. If the president can not control the school, they should dismiss him and secure some one who can. * * * I do not believe in a single body over all the institutions of the State. There is only one possible conclusion of this, and that is that some one will dominate the whole board to the advantage of one institution. Initiative could do little under such conditions.

Commissioner of Education David Snedden, in commenting on the Massachusetts system, says:

My conviction is that the training of the teachers for the public schools of any particular State should be under one authority, even though several schools distributed through the State are devoted to the work. It might be well to have local advisory committees of citizens.

President E. W. Bohannon, of the Duluth (Minn.) State Normal School, offers the following argument in favor of a single State normal-school board. Mr. Bohannon says:

I have had experience in educational work in four States—Indiana, Illinois, Massachusetts, and Minnesota. It is my judgment that the administrative system for the normal schools in Minnesota is decidedly better than that in the other States mentioned. * * * I think it is advantageous to have these schools in charge of such a board rather than a State board of education intrusted at the same time with other responsibilities of an educational character. They are more likely to show initiative and are less likely to become mechanized, stereotyped, and bureaucratic. It is more immediately incumbent upon them to acquaint themselves with the demands made upon them and to devise ways and means of meeting them. They are more likely to experience the impetus to effort that comes from doing things on their own initiative. I do not believe there are any public boards which render so high a grade of service as the nonsalaried board, when rightly constituted. I know that no salary could obtain for Minnesota the quality of service which the State normal school board has rendered, and I am perfectly certain that a State board of education would not be composed of men who would render services of like value. The duties would be too heavy for a nonsalaried board.

An excellent judicial discussion of the advantages of control by local boards versus control by a single State board is contained in the following quotation from a letter written by President David Felmley, of the State Normal University at Normal, Ill. In this State at present control of each school by a separate local board of trustees prevails. Writing concerning his own board, Mr. Felmley says:

Because of the size of the board and its infrequent meetings, great authority is placed in the hands of the president of the institution. He is expected to

recommend all appointments and dismissals of teachers, all increases in salaries, etc., and his recommendations are acted upon without amendment. In 15 years only one case has occurred in which recommendations of this kind were not promptly ratified, usually with very little discussion. In that case, after some discussion, the president changed his recommendation, which then was indorsed.

While the centering of power and responsibility in the hands of the president adds much to the promptness and directness with which things are brought to pass, nevertheless there are certain disadvantages in our system. The infrequent meetings of the board and the large size of the board both tend to diminish the sense of responsibility in the members and their active personal interest in the institution. Yet it must be said that some members of this board have, in spite of these tendencies, been of very high service to the institution. This has been due to the high character of the men who have composed the board and to the fact that usually half of them are active teachers and superintendents and to the long terms through which they have continued in office. Judge Green, of Cairo, served for 41 years; Supt. E. A. Gastman, of Decatur, for 38 years; Mrs. Ella Flagg Young served for 25 years; and many others for more than 20 years.

I am inclined to believe that a board of six, such as is found in connection with the younger normal schools, chosen from the territory immediately tributary to the normal school and holding more frequent meetings, is likely to be a more efficient body.

The efficiency and economy commission of Illinois has recommended one board for the five State normal schools. The normal school presidents themselves are inclined to prefer the present arrangements, for they believe that 35 men, residing usually in as many different counties and with the interests of a single institution at heart, are more likely to feel the personal responsibility for the welfare of that institution, are more likely to interest school boards in employing normal-school graduates and prospective teachers in attending normal schools than if a single board of a few members is charged with the entire responsibility.

It is believed that the total expense of the present board of 35 is no greater than the expense of a unit board of 9, if they give the same measure of attention to the various normal schools as is now given.

On the other hand, it must be confessed that the normal schools find great difficulty in securing unity of procedure in entrance requirements, in graduation requirements, in their definition of a unit of credit, in their fees required of students of different classes, in the amount of credit given to work in other institutions, etc.

While it is not desirable that the State normal schools of Illinois should have identical courses of study, it is important that they should have equivalent courses of study and that the units of credit should be equivalent and interchangeable. This we have been unable to bring to pass under the present organization.

Finally, an extreme plea for the absolute local autonomy of each normal school with no restrictions from any central State authorities may be noted in the following quotation from a letter by John R. Kirk, president of the State Normal School at Kirksville, Mo. In Missouri each normal school is controlled by a local board of trustees. Mr. Kirk says:

"There is no direct relation of the normal school to the State board of education. This is fortunate, since the normal school is closer to its constituents (the people, the school boards, and the public schools) than any State board of

education can possibly be. Each normal school, therefore, adapts itself to the community which it is appointed to serve, and no normal school is obliged to conform to what the other normal schools of the State find themselves required to do. * * *

I might say, in conclusion, that the normal schools of Missouri, by virtue of their organization and great freedom, are among the most fortunate in the country. They are not dominated by [a State] commissioner of education. * * *. They are not subordinated to the State university as normal schools in many other States are. They have no respect for the traditions of those men and institutions who think that the normal schools should offer a short cut to "professional education." Missouri normal schools stand for the idea that the normal-school graduate should be introduced to his profession by the normal school and should thereby be placed on a par with the graduate of the medical college and law school so as not to need recasting and relabeling by a university or any other institution.

Conclusions.—I. The results of any study of this nature are only further evidence, but not unquestioned, of the general tendency toward administrative centralization. The tendency of recent legislation is evidence of the general movement to centralize responsibility and power in normal school control, and, in fact, in all educational matters. Any review of legislation would be impossible in this paper, but the facts relating to the most recent legislation may be briefly enumerated. At least two States have passed during the present year legislation providing for greater centralization of power. California has abolished her joint board of normal school control and vested its powers in the State board of education. North Dakota has a new law creating a State board of regents, a body which is to take over the functions of the former "State board of normal school trustees" and to have charge of the higher institutions of the State. A normal-school president in North Dakota says, in explaining the change of control, that "it was unnecessary duplication and extravagant use of money that led to the board of regents."

II. The recent legislation indicates a demand for educational qualifications for the appointive members of the administrative boards. There seems to be a recognition of the fact that such bodies to be efficient must have clearly defined functions and be composed of persons who are capable of administering the business. Ex officio boards are rightly passing away.

III. Though there are widely different views, my own investigation causes me to favor a single board given sufficient power and so organized as to act effectively as the administrative head of the State public-school system. To meet the objections of extreme centralization a local advisory body properly constituted and organized might well work in conjunction with such a State body.

IV. The status of the principal or president of the normal school should be determined. Though the study does not make this a major point in the investigation, one at once is impressed with the issue.

The prominent fact is that principals possess all degrees of power and responsibility. New York and Connecticut represent two extremes. In New York the principal is responsible to the commissioner of education for the general management and direction of the school. In regard to Connecticut Mr. Charles D. Hine, secretary of the State board, says: "There is no State supervision of the normal schools. The principals substantially control the schools. They are not in accord except in the strong purpose to be unmolested."

Section II. INTERPRETATIVE DISCUSSION OF FACTORS IN ADMINISTRATIVE CONTROL OF STATE NORMAL SCHOOLS.

In the preceding section of this chapter a concrete discussion of the present status of State normal school control was presented by Mr. Henry. His study was based on State educational codes and wide correspondence with educational officials. In the present section the authors of the bulletin present their own interpretative discussion of some of the factors involved in the administration of State normal schools.

Types of governing authorities of State normal schools.—Among the existing forms of governing authorities of State normal schools as described by Mr. Henry, many types are found, each of which involves some one of the following elements, or combinations of several of them:

1. State superintendent or commissioner of public instruction.
 - (a) With relatively permanent tenure, or
 - (b) Elected for a short period of years.
 - (c) Chosen because he is an educational expert, or
 - (d) Elected because of political affiliations.
2. State boards of education or State educational administrative boards or State normal school boards. These may vary in the same ways as indicated under number 1.
3. Local boards of trustees.
4. The principal or president of a single normal school.
5. The faculty of a single normal school.

Local boards of trustees usually do not determine educational policies.—As a rule, a local board of trustees in charge of a single normal school plays very little part in determining the educational policies of the school. For the most part such boards are not composed of persons who are in a position to know the educational needs of the State. They generally supervise the expenditure of the State funds and are often active in soliciting such funds from the legislature. They usually approve automatically any educational policies put up to them by the more purely educational officers, such as the president of the normal school. Consequently, the part played by local boards of trustees will not be considered further in this chapter.

Faculties usually not composed of general educational experts.—Probably in most normal schools the most influential parties in determining the policies of the school are the faculty and the president. It is commonly assumed that the faculty of an institution is best qualified to determine its general educational policies. In some instances this may be true, but in many it is not. The teachers in higher educational institutions, including normal schools, are not employed, as a rule, because they are general educational experts, but because each one is presumably an expert in some specialized subjects or in several related subjects. The individual teacher usually has little interest or competence in general educational problems. In nearly all questions of general policy that arise, his point of view is determined by the interests of his special department. Consequently legislation by such a group of specialists becomes largely a problem of balancing the wishes and claims of a group of specialists. Even if the result were determined by mathematical averaging (as is sometimes the case), the courses of study and other products of faculty deliberations would not correspond to the real needs of the prospective teachers attending the normal school. The matter is made even worse, however, when certain dominant personalities in the faculty secure a disproportionately large recognition of the claims of their departments, resulting in overemphasis on some one subject, such as the history of education, or psychology, or nature study, or art, or any other subject. Furthermore, special difficulty is usually encountered under schemes of faculty control in securing a proper development of the practice teaching situation, which, as will be seen in the next chapter, is one of the most important factors in the successful training of teachers.

Normal-school president is most dominant influence in many systems.—Very often, even when the faculty is nominally in control of the educational policies of a normal school, these are really determined by the president. So powerful is this presidential control in some American schools that their characteristics are generally attributed to the presidents (or principals) by outside educators who are familiar with them. Under this type of leadership some of the schools have served the interests of the State admirably, sometimes for a whole generation under one president. When such a man is a competent general educational expert and administrator, objectively interested in the educational welfare of the whole State, he usually succeeds in maintaining a normal school with a course of study nicely balanced according to the real needs of public-school teachers, and a practice-teaching situation in which all of the efforts of the institution are centralized and by which all departments are tested.

Central State educational officers sometimes supervise normal schools.—In some States a central educational authority of the State

supervises to some extent the activities of the normal schools. This authority may reside in some type of State board or in the State superintendent. The possibilities of such authorities modifying the normal-school situation in a State are well illustrated in New Hampshire, Massachusetts, and Kansas.

New Hampshire normal school changed through action of State superintendent.—In New Hampshire the law requires that "the superintendent of public instruction in his annual (biennial) report shall state the condition of the [normal] school [schools], the terms of admission and graduation, the times of the commencement and close of the sessions." Acting under this law, State Supt. Morrison included the following items in his report for 1911-12 (p. 156) concerning the normal school at Plymouth:

Financial.—In the last report of this office (1909-10) the following statement was made:

"The management of the income of the Plymouth school has for some time been growing lax and in some items extravagant. The matter has been called to the attention of the trustees, and I have no reason to doubt that they will take prompt steps to correct the evil."

On December 28, 1910, after several weeks of careful investigation, I addressed a communication to the board of trustees, calling attention in detail to what seemed to be extravagant and unauthorized expenditure of the public funds. The matter was taken up by the board at a meeting held early in the month of January, and a firm of expert accountants was employed by Gov. Bass. The report of the accountants revealed a very untoward condition of the finances of the institution, involving entirely improper use of public money, as well as numerous unauthorized expenditures extending over a period of years. The matter received prolonged consideration by the board, and the accountants, as well as the principal and his attorney, were heard. On July 16, 1911, the principal's resignation was accepted.

The Keene finances were meantime well conducted.

The entire arrangement for financial administration at Plymouth was changed.

In discussing the *educational* policies of the State normal schools, Supt. Morrison describes the steps taken by the State department to improve the course of study and the quality of the teaching in the two State schools. This description will be quoted in a later chapter on course of study.

Critical studies of Massachusetts normal schools, directed by Commissioner Snedden.—In Massachusetts we find State Commissioner Snedden attacking the problems in a much larger normal-school situation than that of New Hampshire. In his report for 1912-13 he describes the initial steps in getting the normal-school authorities to make a critical study of their own practices. The need of such critical study and the possibility of a central State authority's securing the cooperation of local normal school authorities in improving their own activities are tactfully suggested (pp. 24-26) by Mr. Snedden in the following paragraphs:

Marked differences have always existed among the normal schools as regards courses of study and requirements for practice teaching. Each school has ex-

hibited considerable individuality in the matter of its aims, means, and methods of instruction, thus often reflecting the particular educational philosophy of the principal or the composite opinion of the stronger members of the faculty. Within reasonable limits this is an excellent policy. It is not desirable that all the schools should be of one pattern as regards their courses and methods of instruction, although, as suggested elsewhere, general standards as to aims and practices should be agreed upon by all schools, after which departure from such standards may be made by individual schools as matters of conscious and purposeful policy.

It is not practicable in this report to indicate in detail the differences which have hitherto existed among the normal schools in their programs of professional training. Some of these differences have arisen from praiseworthy attempts to do experimental work in new and complex fields of education. In other cases practices established by accident or for temporary reasons have become fixed as customs, the educational value of which must be carefully tested from time to time.

All educational practice is now in process of slow transition from a primitive stage of development, in which customs accidentally initiated, or formed by slow growth, have prevailed to a stage wherein intelligent planning and the measurement of results shall give the basis of a more scientific formulation and control of courses of instruction, methods of teaching, and general supervision.

Because of these changing conditions the commissioner, the principals, and various groups of special teachers in the normal schools have, during the last four years, been holding a series of conferences at which existing programs of normal-school instruction have been subjected to careful examination in order to discover means of making these programs more effective.

These conferences have revealed a wide divergence of views on almost every phase of normal-school instruction. Each school, in one or more divisions of its work, has long followed practices which seemed to it valid. The discussion and analysis involved in these conferences resulted temporarily in a measurable unsettling of convictions, often lifelong, held by many teachers. This disturbance has now wholly subsided, but in all the schools a fine and sound professional spirit has been shown in the effort to revise normal-school programs in the interest of greater efficiency. Some of the proposals to this end, now under consideration, are discussed in the following section of this report.

Because of the complexity of the problems involved in training teachers, it is as yet too early either to indicate positively the prevailing forms of inefficiency in normal-school programs, or to state concretely proposed improvements. A scientific attitude necessitates careful and painstaking study of these problems. Existing practices can not, with safety, be discontinued or hastily modified. It is, however, highly important that the principals and teachers in the normal schools shall show that they are alive to the need of steady improvement in educational practice, and that, individually, and especially by joint effort, they shall continue to give time and effort to the discovery of ways and means to secure greater efficiency.

Kansas State normal-school system changed by the State administrative board.—The third example which we shall note of a central general educational authority modifying the normal schools of the State is the work of the State administrative board of Kansas. This board was organized in 1913 to have administrative charge of all of the higher educational institutions of the State. It is a salaried

board, but the members of it are not educational experts. The board has been very active in reorganizing the normal-school situation in the State, and some statements of its procedures are contained in the following quotations from its official reports. Its general plan of administration is described in the following paragraphs:

In accordance with the direction of the law, we organized on March 20, 1913, and although there was no provision to pay our salaries, we found it necessary to spend all our time in the schools until July 1, when we took full charge. We met with the retiring boards and worked on the catalogues and courses of study submitted to us by the faculties, passed on the budgets and nominations made by the presidents, and had the necessary work which we were directed to do in shape on July 1, 1913, when the old boards went out of existence. Since that time we have been in continuous session.

The board of administration, as soon as it organized, called in the heads of the institutions for a conference and announced to them that it would hold each of them strictly responsible for the internal management of his institution and would not attempt any unnecessary internal management. As it visited the schools, it completed its work by reelecting all members of the faculties recommended by the presidents and filled vacancies upon their recommendation. The board has consistently followed this plan from the beginning.

The board has met with the presidents each month and thoroughly canvassed the question as to the kinds of teachers to be employed in the schools and all other problems involving their welfare, and we wish to express to Chancellor Strong, Presidents Waters, Butcher, Brandenburg, and Lewis our gratitude for the way they have put aside their individual interests and advised with the board for the good of the system as a whole. * * *

CONSOLIDATION OF BUSINESS OFFICES AND PURCHASING DEPARTMENTS.

The board found that each of the institutions was maintaining elaborate business offices and purchasing departments, and for economy and efficiency in buying consolidated them all at Manhattan until room could be secured in the statehouse. It is thus able to do the work for all the schools at what it formerly cost to do the work at one school. The saving is thousands of dollars. Instead of purchasing at retail and in small lots, we have joined with the boards of control and correction, buying in large lots direct from the manufacturer. We thus save the difference between the manufacturer's price and the retailer's price—a large item of saving for the State.

UNIFORM REGISTRATION SYSTEM.

We have put in a uniform system of registration and record keeping and evaluation of credits, and can now transfer clerks and students' grades from one school to another, so that they will be able to take up the system without trouble. We have also installed in all the schools an up-to-date system, by which it will be possible to refer promptly, and without expense of time, to the grades of every person who attends the institutions. We have been put to a great deal of trouble and expense in searching through odds and ends of old records in some of the institutions, frequently having to go back to the old class books of instructors to find the grades of students who desired to complete their work in that or other institutions. A careful system of keeping these all-important records in these institutions would have saved thousands of dollars. * * *

ADMISSION TO THE NORMAL, COLLEGE, AND UNIVERSITY, AND HIGH-SCHOOL
VISITATION.

The institutions of higher learning in the United States are pretty thoroughly standardized. In order that the institutions under our control shall maintain their standing in these associations and make their degrees of any value, it is necessary not only that they shall do good work themselves, but also that they shall know and certify the work of preparatory schools whose students they take without examination. They must either examine the school that is preparing the student or examine the pupil when he appears for admission. The first plan has become the accepted one, and when we began our duties the university, the agricultural college, and the normals each maintained a separate system of visitation in the high schools. The result of this system was that the representatives of all these institutions would frequently visit one high school during the year, and none of them reached every high school. We established a committee on school relations to do the work of visitation systematically.

Michigan and Minnesota.—The three examples described above, namely, New Hampshire, Massachusetts, and Kansas, depict situations in which specialized, salaried State officers took an active part in the control of State normal schools. The operation of another type of central control is seen in the cases of Michigan and Minnesota, where a nonsalaried, special, central State board has charge of the normal schools of each State, and this board in each case is influenced more or less by recommendations from the presidents of the State normal schools. Sometimes the board appears to follow the recommendations of the presidents of the several schools, and in other cases to act more independently. An example of the actions of the Michigan board is given below on page 117 (concerning special teachers) and of the Minnesota board on pages 102-104 (concerning training high-school teachers). More complete historical descriptions of typical developments in cases where the presidents of the State normal schools have cooperated with such a central board of control would be illuminating in determining the value of this type of administrative arrangement. To some observers it would seem to be the best type, since it may involve a committee of educational experts (normal-school presidents) presenting joint recommendations to a responsible board which represents the people of the State and the interests of all sections of the State. It is probably desirable to have the State superintendent of public instruction an active member of the board which controls the normal schools in order to bring to the assistance of this board such expert services as he and his office can render.

Chapter V. PRACTICE-TEACHING FACILITIES.

An important factor in determining success of normal school.—One of the most important factors in determining the possible and actual success of a normal school is the practice-teaching facilities. This fact is generally recognized and admitted by most normal-school authorities, and has been referred to in Chapter III, where one of the four conditions which was emphasized in determining the location of a normal school in a town was the possibility of expanding the practice-teaching facilities so as to take care of any number of students that may come to a normal school.

Zone of normal school should be limited by practice facilities.—Where a ~~new~~ existing normal school is unfortunately located so that the limit of adequate practice-teaching facilities is reached, the State authorities should take cognizance of this fact, place a limit on the attendance at the normal school and a proportionate limit on the funds devoted to its maintenance; so restrict its zone or district that the latter will be adequately served; and proceed to establish a new normal school, so located that it may always provide adequate practice facilities for the area it is to serve.

New Hampshire normal schools so planned.—That the development of the normal-school policy of a State may actually follow these lines is shown in the report of State Supt. Morrison, of New Hampshire, from which quotations have already been made. In the quotation concerning the Plymouth Normal School (see above, p. 23) Mr. Morrison stated that the practice-teaching facilities restrict the growth of this school to 150 students and are hardly adequate for this number. According to the same report, the public schools of Plymouth enroll about 300 to 350 children who are 14 years of age and under. On the other hand, Mr. Morrison estimates that the Keene Normal School could take care of an annual enrollment of 480. The public schools of Keene enroll from 1,100 to 1,200 children 14 years of age and under. From these figures it would appear that Mr. Morrison estimates that the schools which are available for practice purposes of a normal school that maintains only a two-year course for high-school graduates should contain from two and one-half to three times as many pupils as there are students in the normal school. The amount of

practice which Mr. Morrison contemplates is contained in his statement that "each student before graduation must 'make good' by teaching one-half of each school day for 18 weeks in the practice schools, being responsible for the conduct of classrooms for that time." (P. 153.)

Standard needed for amount of practice teaching per graduate.—The last paragraph suggests that, in order to carry out the policies described above, it is necessary to determine some measure or standard by which the practice-teaching facilities of a town can be measured. Obviously the first step in determining this standard is to ascertain how much practice teaching should be required of each normal-school graduate, and the conditions under which it should be done.

Practice-teaching conditions should approximate real conditions.—To take up the question of conditions first, it is generally admitted that the closer these approximate the real situations as they exist in ordinary public schools the better. This means from 40 to 60 children in a room divided into not more than two sections. A further condition is the possibility of placing a practice teacher in charge of this situation for a somewhat continuous period—for example, every morning for from 4 to 18 weeks. This does not mean that all the practice teaching in a given normal school need be done under these conditions, since a student may profit a great deal from teaching much smaller groups of children for a half hour a day for several weeks. But to get the *best* results, the more continuous practice under typical school conditions should also be provided. It is provided in a great many situations; hence it *can* be provided, and all normal schools should be so located as to make possible such provision. As long as it is easily possible to secure the *best* conditions, there is no justification for being satisfied with *inferior* provisions.

Artificial training school plus subsidy of local public schools.—The two types of conditions described above, namely, small groups of children under somewhat artificial conditions for initial practice teaching plus regular full rooms for longer continuous teaching under real public-school conditions, are secured by constructing a large training or practice school under the direct charge of the normal school, and making arrangements with the local city authorities for practice teaching in the regular public schools. Such an arrangement is usually effected by State subsidy of some form to the local public schools. This subsidy may take a variety of forms; for example, it may involve the normal school's paying an increase of salary to certain of the teachers who act as critic teachers, or paying all of the salaries of such critic teachers, or increasing the salaries of all teachers, etc. In addition to the subsidy, the normal school sometimes furnishes gratis expert supervision for part or all of the activities of the public schools that are used for practice teaching. In a few cases the public

schools are placed entirely under the direction of a normal-school officer.

Examples. *Mayville, N. Dak., using town schools (1912).*—The following are typical examples of arrangements for practice teaching in public-school systems. The 1912 report (p. 64) for the State Normal School at Mayville, N. Dak., states that:

The public schools of Mayville have continued to be used as the practice department. For eight months of each school year the normal school has paid each of the grade teachers and the principal of the public schools from \$20 to \$25 per month, in addition to their regular salaries, and the local board of education \$62.50 a month toward meeting the expenses of heating and janitor service in the public-school building. The total cost per year to the normal school has been about \$1,700. In return for this outlay the normal school has been permitted to let the members of its senior class, under the direction of the normal-school supervisor of practice, observe and teach in the grades at certain hours of the day throughout the eight months of the year when both schools are in session. The supervisor of practice has received the assistance of the public-school principal and grade teachers in the management and instruction of the senior class.

New Hampshire contracts give State charge of local practice schools.—In New Hampshire—

contracts with the local communities give the normal schools the use of the entire elementary system in the town of Plymouth and in the city of Keene for model and practice purposes.

At De Kalb, Ill., a town of 8,000 population—

all practice teaching is done in the city schools. Two schools are used for this purpose. One of them is in the normal training school building; the other is in one of the city buildings. Each is an eight-grade school.

The director of the training department is also superintendent of schools of the city.

Providence, R. I.; normal training school plus many "training stations" in public schools.—Finally, one of the most completely developed practice teaching situations, as far as facilities are concerned, is that of the State Normal School of Providence, R. I. The regular enrollment of the normal school for 1913-14 was 460 students, all high-school graduates. The number in the graduating class for 1913-14 was 134. To provide practice teaching facilities for this number the normal school has a training school of its own, 9 other "training stations" in the public schools of Providence, and 15 "training stations" in neighboring towns. The official description of this elaborate system is given in the following quotation from the catalogue for May, 1914 (p. 30):

THE SCHOOL OF OBSERVATION.

The school of observation, on the first floor of the normal building, comprises a kindergarten and eight grades, with one room for each grade and

one ungraded room. There are about 40 pupils in each of the regular grade rooms. Most of these children come from the city district adjoining the building. Others from outside the district may be admitted on the payment of tuition at the rate of \$32 a year for the kindergarten and primary grades or \$40 a year for grammar grades.

The course of study in this school is similar to that in the Providence public schools. The same subjects are taught and the same books are used. In addition, much time is given to various forms of practical training. The girls have sewing in grades 5 and 8, and cooking in grades 6 and 7. The boys have wood and metal work or printing.

An effort has been made to connect the manual training as closely as possible with elementary science, in which many of the boys have become greatly interested.

The functions served by the school of observation are as follows:

1. It furnishes opportunity for the students of the normal school to see good teaching. It supplies illustrative material for class discussions on methods. Lesson plans may here be tested and criticized from experience, instead of on a theoretical or imaginary basis. It is to the normal school what the clinic is to the school of medicine. It helps to keep the work of the normal school on the right basis by constantly magnifying the practical instead of the theoretical. It gives a worthy ideal to the prospective teacher.

2. It furnishes under the most helpful and encouraging conditions an opportunity for the young teacher to begin her practice teaching. For one hour of the day the school may be used for this work. The rest of the day the children spend under the regular grade teachers. By having this preliminary practice so closely connected with the study of methods, something more is added to the discussions than could be gotten from observation alone. At the same time the student has an opportunity to do her first teaching in a most stimulating environment, and with little responsibility for the general discipline of the room. Her first effort may thus be given to a masterly presentation of her subject, unhampered by needlessly disturbing conditions. She gains confidence in her own ability, learns to be critical of herself and to accept criticism from others, and in a measure gets the professional point of view, which is, essentially, that by continued endeavor and the wise use of aids of various sorts, it is possible to continually improve in skill and general teaching ability. She is brought to a recognition of the fact that good teaching is fundamental to discipline. It follows that the young teacher is here trained to emphasize the essential matters, and that she is well fitted for the next step in her preparation, the training school.

3. It is a meeting place for theory and practice in the school itself, offering to teachers in the different departments facilities for testing themselves and their own methods in the light of experience with the children for whom the work is intended.

4. It should illustrate for those teaching elsewhere the methods and courses recommended by the normal school. The school of observation should be the model school through which the State may present, as far as possible, its ideal of a satisfactory public school. It should not attempt to carry on its work expensively or to include courses which may not to advantage be included in other public schools. Its aim should be to show how a course of study that is truly efficient in its results may at the same time be conducted with economy.

5. While the main functions of the observation school are those expressed above, it would not fulfill its duty to the State if it did not provide opportunity for the study and evaluation of new ideas which seem to give special promise of worth. Its work with the Montessori material is an illustration of this point.

THE TRAINING SCHOOLS.

The training schools are established by contract with the local authorities. At present there are 24 such centers established as follows:

	Grades for practice.
Barrington: Lincoln Avenue School	5-7
Bristol:	
Oliver School	1, 5
Walley School	4, 5
Burrillville: Harrisville School	2, 4
Central Falls: Garfield Street School	1, 6
Cranston:	
Eden Park School	4, 6
Meshantuet Park School	1-7
East Providence: Grove Avenue School	3, 4
Pawtucket:	
East Street School	1, 3
Prospect Street School	6, 7
Providence:	
Bridgeman School	5, 6
Doyle Avenue School	5, 6
Branch Avenue School	3, 4
Grove Street School	2, 3
Regent Avenue School	1, 3
Temple Street School	3, 4
Thayer Street Grammar School	5, 7
Willow Street School	1, 3
Camp Street School	1-4
South Kingston: West Kingston School	1-8
Warwick: Apponaug School	4, 5
Westerly: Bradford	1-4
Woonsocket:	
Pothier School	3, 4
Willow Street School	2, 4

Each training school has a critic teacher nominated by the trustees of the normal school and elected by the school committee in the town or city in which she serves. Two of the regular schoolrooms are set aside for student teachers under her direction. Here the young teachers receive a thorough training in the actual work of the schoolroom for a full half year of apprenticeship.

This system of training embodies to a remarkable extent the recommendations of the "Report of the Committee of Fifteen on the Training of Teachers." After the first preliminary teaching in the observation school, student teachers are trained, not by making them assistants or substitutes or by giving them small groups of children, but by placing them in charge of regular schools under such conditions as they will meet after graduation. Here, during the five months of training, they are thrown on their own resources to a large extent. They learn to master the work of one grade and to teach with due regard for the development of the children; and they gain that close contact with child life, so essential to a good teacher, which can be gained only by one who is in charge of her own children.

The West Kingston Training School, of which a plan is shown [on page 52], is intended to be a model of what rural schools should be. When constructed in 1812 it took the place of four single-room buildings, and it is a clear demonstra-

tion of the possibilities of consolidation. The children are transferred to and from the school by carriages. The building is arranged as indicated by the plan of the ground floor. The problems of lighting and heating have been very satisfactorily solved; the closets are on the main floor; in the basement are a kitchen and manual training shop, which have been adequately equipped at very small expense, and a hot-air engine for pumping the supply of water.

The school is near the West Kingston railroad station and can easily be seen as one passes on the train.

Calculation of standard for measuring practice facilities of a community.—The examples given above are typical of the arrangements made in normal schools to secure desirable conditions for practice teaching, namely, conditions that approximate as closely as possible the real public-school conditions that will confront the new teacher when she secures a position. This discussion of conditions was in-

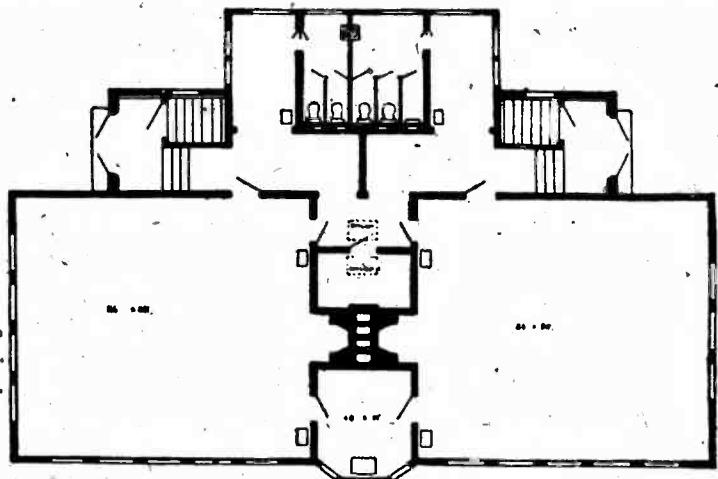


FIG. 3.—Plan of model rural school of Providence (R. I.) State Normal School, located at West Kingston.

troduced in connection with the attempt to secure some standard by which the practice-teaching facilities of a locality could be measured. The other factor entering into the determination of this standard is the amount of practice teaching to be required of each student. To simplify the calculation we shall assume that this is the amount to be provided for each graduate in a two-year normal course for high-school graduates.

Minimum, 100 hours per graduate; maximum, 90 half days per graduate.—To begin our analysis we need a fairly representative minimum and a fairly representative maximum of the amounts of practice teaching that would be considered necessary by normal-school authorities. As a fair maximum we may take Morrison's figure for New Hampshire, namely, teaching one-half of each school

day for one semester or half year, being responsible for the conduct of the classroom for that time. As a minimum we may use the minimum amount agreed upon by the representatives of the normal schools of Ohio, and which seems to fulfill the legal requirement in that State, namely, 100 full hours of actual teaching. This may be reduced to the basis of half days and weeks by estimating the number of hours in a regular school day. If 5 hours of teaching is considered equivalent to teaching a regular school day, the minimum of 100 hours would equal 20 full school days, or 40 half days. Forty half days are equivalent to one-half of each school day for eight weeks.

Minimum, 4 weeks of whole days; maximum, 9 weeks of whole days.—As maximum and minimum amounts of practice teaching, then, we would have the following figures as the amount of practice teaching to be required of each graduate: *Maximum*—18 weeks of half days, equivalent to 9 weeks of full days. *Minimum*—8 weeks of half days, equivalent to 4 weeks of full days.

Each group of children may train two-thirds or one-half times 4 to 9 practice teachers a year.—Assuming that the regular school year is 36 weeks long, we can easily calculate from these figures the number of practice teachers that could be accommodated by one group of children, providing all of the teaching of the children is done by practice teachers.

With the maximum amount of teaching—namely, 9 weeks of full days—one group of children may accommodate 4 practice teachers in a year.

With the minimum amount of teaching—namely, 4 weeks of full days—one group of children may accommodate 9 practice teachers in one year.

Not all teaching may be practice teaching; corrected estimate.—It is not likely, however, that all the teaching of a group of children will be done by practice teachers. No community is likely to permit more than half of the teaching in the public schools to be practice teaching. Moreover, many normal schools restrict the amount permitted in the training school; for example, in the quotation from the Rhode Island Bulletin given above, it was limited to one hour a day with each group of children. Most training schools permit more than this; however, probably not more than two-thirds of the teaching is usually practice teaching. Hence, in order to secure a more correct estimate of the practice teaching opportunities afforded by a single group of children, we must differentiate the specialized training school from the ordinary public school in which some practice teaching is permitted. In the training school it may be that two-thirds of the teaching will be done by practice teachers, and in the public school, one-half by practice teachers.

According to this revised estimate we secure the following standards:

In a training school where two-thirds of the teaching is done by practice teachers, each group of children will accommodate annually two-thirds times 4 to 9 practice teachers.

In a public school where one-half of the teaching is done by practice teachers, each group of children will accommodate one-half times 4 to 9 practice teachers annually.

From 20 to 40 children constitute a "group."—With these figures (namely, two-thirds or one-half times 4 to 9 practice teachers annually for each group of children) it is only necessary to decide how many children should constitute a group in order to determine the practice-teaching facilities available in any community. If we take our point of departure for this estimate from the idea that the conditions should closely approximate real school conditions, we would say each group for which a practice teacher is responsible should consist of either half or all of a room containing about 40 children. Except in specially constructed training-school buildings (where there are "group" rooms) the practice teacher would probably have to be in charge of a full room.

On the basis of these assumptions, with the standards obtained above, the following table is secured showing the number of practice teachers which a given number of children may accommodate annually:

Special training-school building.—Twenty children to a group, each group accommodating two-thirds times 4 to 9 practice teachers annually, two-thirds of the teaching being done by practice teachers.

The numbers of children which will accommodate annually certain numbers of practice teachers in special training-school buildings are as follows:

100 children, 13 to 30 teachers.

200 children, 27 to 60 teachers.

300 children, 40 to 90 teachers.

400 children, 53 to 120 teachers.

500 children, 67 to 150 teachers.

600 children, 80 to 180 teachers.

700 children, 93 to 210 teachers.

Regular public-school building.—Forty children to a group, each group accommodating one-half times 4 to 9 practice teachers annually, one-half of the teaching being done by practice teachers.

The numbers of children which will accommodate annually certain numbers of practice school-teachers in regular public-school buildings are as follows:

120 children, 6 to 14 teachers.

160 children, 8 to 18 teachers.

200 children, 10 to 23 teachers.
240 children, 12 to 27 teachers.
280 children, 14 to 32 teachers.
320 children, 16 to 36 teachers.
480 children, 24 to 54 teachers.
640 children, 32 to 72 teachers.
800 children, 40 to 90 teachers.
1,280 children, 64 to 144 teachers.

Measurement of community practice facilities of typical normal schools.—With these figures as a basis, anyone can proceed to estimate the possible practice-teaching facilities in a number of typical normal schools, using as a basis the figures for school population and average daily attendance in the public schools of the community in which the school is located as given in the report of the United States Commissioner of Education. As a matter of fact, many of the normal schools do not actually enjoy such facilities as would be indicated by these theoretical calculations, owing to the fact that they have training schools with relatively few children, or they have not succeeded in making arrangements whereby they can utilize half of the time in the public schools for practice-teaching purposes. As a consequence some normal schools have outgrown the most liberal estimate of practice-teaching facilities at their command, while others will soon do so if they begin to provide the number of trained teachers needed in their districts.

Chapter VI.

STUDENTS AND GRADUATES.

Numbers significant only in relation to educational policy.—To know the absolute number of students in the various State normal schools is of little importance. On the other hand, to be able to relate the number of students to their rank, to the practice-teaching facilities of the locality, to the scheme of certification in force in each State, and to the cost of instruction would be quite instructive in determining the value of various types of normal-school policy.

Reliable data even on attendance are difficult to secure.—Unfortunately, up to the present time it has not even been possible to secure reliable published figures of the absolute size of most normal schools in terms of the number of students under instruction at any one time. This is due to the fact that so many normal schools simply give in their catalogues and published reports the number of *different* students enrolled during the year, including the summer term. Inasmuch as many of these students are in attendance for only six weeks, the data merely confuse instead of enlightening the reader.

Exceptional and excellent statistics by Supt. Evans, of Missouri.—The possibility of making a clear and illuminating report on normal-school attendance in a State where there are many short-term students to complicate the situation is illustrated by the accompanying table from the 1913 report of State Supt. Evans, of Missouri.

[Missouri] State Normal School statistics [1912-13].

[A model table concerning students and faculty.]

Year.	Kirksville.		Warrensburg.		Cape Girardeau.		Springfield.		Maryville.	
	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.
<i>Students enrolled in fall term of 1912:</i>										
First year.....	50	110	101	203	70	96	108	84	78	47
Second year.....	100	60	100	133	75	65	91	57	54	34
Third year.....	120	75	47	17	66	10	71	19	31	.....
Fourth year.....	111	45	68	1	82	3	54	6	34	.....
Total.....	381	290	316	354	253	174	324	166	197	81
<i>Students enrolled in winter term of 1912-13:</i>										
First year.....	50	102	108	196	97	99	118	93	98	51
Second year.....	110	80	108	162	70	65	102	81	62	38
Third year.....	120	85	65	20	67	13	80	19	32	.....
Fourth year.....	126	45	68	42	5	66	6	47
Total.....	405	312	390	378	266	183	366	199	230	86

STUDENTS AND GRADUATES.

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[Missouri] State Normal School statistics [1912-13]—Continued.

Years.	Kirksville.		Warrensburg.		Cape Girardeau.		Springfield.		Maryville.	
	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.	High-school rank.	College rank.
Students enrolled in spring term of 1913:										
First year.....	15	110	106	205	223	76	225	119	40	61
Second year.....	80	80	102	178	92	64	231	88	37	33
Third year.....	103	80	60	33	46	61	118	22	20	.....
Fourth year.....	103	45	77	.....	49	3	94	8	36	.....
Total.....	301	315	344	416	410	204	668	237	133	94
Students enrolled from September, 1912 to May, 1913:										
First year.....	76	135	135	235	251	90	271	197	77	79
Second year.....	145	95	144	175	100	84	239	166	88	40
Third year.....	195	93	106	41	73	61	180	28	38	.....
Fourth year.....	183	52	120	5	70	3	133	8	62	.....
Total.....	596	375	507	456	494	238	823	397	265	119
Students enrolled in summer term of 1913:										
First year.....	35	190	199	412	161	126	240	215	65	101
Second year.....	130	140	232	187	96	71	217	164	105	31
Third year.....	153	100	189	76	53	35	264	44	89	.....
Fourth year.....	170	60	109	3	65	9	206	32	124	.....
Total.....	498	490	729	708	375	241	917	458	383	132

[Missouri] State Normal School statistics [1912-13]—Continued.

	Kirksville.	Warrensburg.	Cape Girardeau.	Springfield.	Maryville.
Men in faculty, regular term.....	31	26	18	16	15
Woman in faculty, regular term.....	25	25	19	17	10
Total number in faculty, regular term.....	56	51	37	33	25
Men in faculty, summer term.....	37	34	18	23	20
Women in faculty, summer term.....	4	31	12	26	13
Total number in faculty, summer term.....	41	65	30	49	32
Students attending all the year, Sept., 1912, to May, 1913.....	436	499	330	363	154
Number enrolled, fall term, 1912, who were enrolled preceding year.....	360	366	210	347	116
Number enrolled in 1912 who hold four-year high-school diplomas.....	470	396	415	588	130
Number enrolled in 1912 who had no experience in teaching.....	700	908	492	420	408
Number enrolled in 1912 who had less than two years' experience.....	380	439	938	632	128
Number enrolled in 1912 who had two and less than five years' experience.....	290	416	211	700	134
Number enrolled in 1912 who had five or more years' experience.....	300	341	131	246	106
Number of different persons enrolled in 1912:					
Male.....	652	470	373	781	165
Female.....	1,027	1,515	690	1,357	617
Total.....	1,679	1,994	1,072	2,018	782
Number enrolled from September, 1912, to August, 1913, in the following courses:					
Education.....	1,460	3,534	1,738	4,123	968
Vocal music.....	900	666	665	810	203
Agriculture.....	500	960	204	518	260
Nature study.....	100	164	28	79	.....
Cooking.....	60	173	134	265	162
Plants sewing.....	50	104	220	94	57
Draughtsmanship.....	60	68	53	187	.....
Free-hand drawing.....	400	480	486	1,300	263
Mechanical drawing.....	15	32	58	41	17
Elementary hand work.....	150	59	117	431	205
Woodwork.....	400	54	173	63	119
Forge and machine shop work.....	50	56	24	.....	.....

[Missouri] State Normal School statistics [1912-13]—Continued.

	Kirksville.				Warrensburg.				Cape Girardeau.				Springfield.				Maryville.			
	Full term.	Winter term.	Spring term.	Summer term.	Full term.	Winter term.	Spring term.	Summer term.	Full term.	Winter term.	Spring term.	Summer term.	Full term.	Winter term.	Spring term.	Summer term.	Full term.	Winter term.	Spring term.	Summer term.
Average daily attendance...	640	678	590	940	660	687	746	1,415	412	425	578	575	433	481	792	1,218	230	275	198	486
Number of daily recitations...	200	210	200	220	184	177	173	192	114	122	119	118	108	112	156	224	74	80	75	93
Highest number of pupils enrolled in any class...	50	53	45	58	48	49	49	60	51	51	80	84	46	43	51	64	59	48	39	46
Least number of pupils enrolled in any class...	6	7	10	6	3	3	3	5	1	2	1	1	4	5	7	10	6	5	5	5
Average number of pupils per class...	20	23	20	26	18	19	20	31	17	18	18	19	18	19	24	29	18	18	14	22
Average age in years of those attending...	20	21	22	25	20	21	21	26	19	20	21	23	20	21	24	26	19	20	20	22

This report is remarkable for the number of interesting things that can be learned from it. It gives practically every kind of information that anyone might want concerning the registration of students in any normal school in the State. For example, take the school at Warrensburg. According to the ordinary method of reporting, Warrensburg would be reported as having 1,994 students (different persons enrolled) during 1912-13. But a glance through the columns shows that the average attendance in the fall, winter, and spring terms was only 660, 687, and 746, respectively, jumping up to 1,415 in the summer. Furthermore, by glancing elsewhere in the table we can see that about half of these students are of high-school grade—i. e., in the fall term there were 354 college students, or about the same as the number in the larger Massachusetts normal schools. Moreover, the analysis of this number of college students in the fall term shows that there was only one senior (fourth-year student) and 17 juniors (third-year students). The rest were freshmen and sophomores. Unfortunately, this report does not give the number of graduates in the various courses offered.

Need average attendance to measure number of students.—One of the most important and most useful figures given in this Missouri table is the average daily attendance for each term. This figure is also given in the tables in Commissioner Snedden's report for Massachusetts which will be used in a later chapter. It is a figure that all school authorities are now familiar with as the standard basis for reporting attendance in elementary schools. Its utility as a basic measure in such reports, for making various calculations and comparisons, is generally recognized. It would be just as useful for normal-school authorities, and until it comes into common use in normal-school reporting there is little prospect of securing reliable comparative measures of most normal-school activities.

Students of high-school rank reduce professional efficiency.—The proportion of high-school and college students in a State normal school is important from the standpoint of serving the State's purposes, for which most normal schools are established, namely, training teachers for the State rather than furnishing a convenient form of general education for certain communities. In other words, if normal schools have to spend a portion of their funds and energy in giving general high-school instruction, to that extent they are handicapped in their efforts to give special professional training for teachers. Hence, if the high schools of a community are capable of providing the necessary high-school instruction, it would be unnatural to find students of high-school grade in the local normal schools. If the high-school situation of a State has been inadequate, but is improving, a parallel elimination of high-school students from the normal schools might be expected.

Examples of professional improvement through elimination of high-school pupils.—Good examples of this process of gradually raising the normal-school standards as local high schools improve are found in the reports of a number of States.

Idaho.—In Idaho, for example, the improvement in the Albion Normal School is described in the 1912 report of the State superintendent in the following words (p. 29):

The last two years have seen a rapid advancement in educational work of all kinds in southern Idaho. The high schools are growing rapidly in numbers, and those established are strengthening their courses of study. In a few years practically all students will be enabled to secure the greater part of their high-school work in their home schools, with the possible exception of the work in science, advanced manual training, and advanced domestic science, proper laboratory facilities for which are too often wanting in the smaller schools. These increased facilities have already relieved and will relieve the State schools from the necessity of providing for the high-school training of many students who formerly were compelled to secure their high-school training at a State institution, if they secured it at all. The result has been a distinct change in the class of students attending the State Normal School at Albion. At the time of the opening of the school in 1895 there were not a half dozen real high schools in the State; and it is thought there was not a high-school graduate among the students enrolled the first year. The students were compelled to take up even seventh and eighth grade work because they had not had opportunities to get that work. In consequence, the lower classes far outnumbered the higher classes and the heaviest enrollment was in the preparatory department, which was really doing seventh and eighth grade work.

Each year the students have offered better preparation in their work as the schools of the State have offered better facilities. The preparatory department has long since been dropped, and the few students applying for work formerly done in that department are accommodated in the training school. Each year the number of students asking for high-school work has decreased, and each year the number of high-school graduates enrolled has increased. * * * It is the policy of the school to relieve itself of all high-school work as rapidly as the advancement of the school facilities of the State will permit and ultimately to

require high-school graduation for admission to all courses. Every teacher in the common schools should be a high-school graduate, with at least two years of professional training in addition to his high-school work, and that ideal is being rapidly approached, more rapidly than many may realize.

Louisiana.—Another good example of this progressive elimination of students of high-school grade from the State normal schools is found in the report of the Louisiana State Normal School for 1914 (p. 11). It reads as follows:

Prior to the opening of the summer quarter in 1911, the requirement for admission to the Normal School was the completion of the seventh grade of the public schools. At that time the course was advanced a half year. In June, 1912, the standard was raised another half year, bringing the requirement for admission up to the completion of the eighth grade or first high-school year. In December, 1913, another advance of a half year was made. Therefore, during the last three years, the normal course of study has been raised by one and one-half years of public-school work. On June 1, 1914, another advancement of a half year will be made. * * *

The effects of this raise in standard are twofold, to wit:

1. Better training of students, arising from a more advanced grade of pupils and an emphasis on more advanced subjects of instruction. The changes have made possible the introduction of higher courses in mathematics, the languages, and all the sciences; and the relegation to the lower terms of many branches of high-school grade which were formerly taught in the most advanced classes.
2. An arrest in the numerical growth of the student body, a condition that was anticipated. The effect in this direction of advancing the standard of curriculum is revealed by the fact that the enrollment in the three lowest terms (those that have been eliminated) was 161 during the spring term of 1911.

Virginia.—Similarly in the report of the State superintendent of Virginia for 1911-12 appears the following statement in the report of the president of the normal school at Farmville (p. 442):

The marked improvement in the rural schools has, to a great extent, changed the personnel of the new students who enter each year. Instead of being forced, as in the past, to offer a year of review work in the public-school branches, we are now able to enter practically all our students not lower than the second year of the academic course. The professional courses, open to graduates of approved three and four year high schools, enrolled a larger number than ever before.

Massachusetts and Rhode Island admit only high-school graduates.—As examples of States that have completed the process of eliminating high-school students there are the normal schools of Massachusetts and Rhode Island, which have reached the point where they are open only to high-school graduates. In discussing this fact Commissioner Snedden, of Massachusetts, says in his report for 1912-13 (pp. 23-24):

The requirements for admission to the normal school have long constituted a serious problem. When students were received from the elementary schools, as was once the case, the normal-school courses were, as a result, mainly academic, rather than professional, in character. Massachusetts was one of the first States to raise the standards of admission to normal schools by requiring high-school graduation as a condition for entrance.

Graduates of high schools on the approved list of the New England College Entrance Certificate Board, or of high schools approved by the board of education, are now admitted to the normal schools on certification. Applicants not holding certificates are required to take an examination, the questions for which are prepared under the direction of the board. Through this inspection and the accompanying testing of the work of the smaller high schools, the board has been able to raise to some extent the standards of high-school instruction throughout the State.

High-school graduates must also pass entrance examinations in elementary school subjects in Rhode Island.—The Rhode Island Normal School report for 1913 gives a general discussion of the raising of standards in order to secure more effective results from available facilities in the training of teachers for the State (p. 14). The report states that as early as 1906 steps were taken to eliminate high-school students in order to make room for distinctively normal students. In 1913 the standards were further raised by establishing for high-school graduates a series of entrance examinations in the elementary-school subjects as described in the following paragraph (p. 25):

By a recent vote of the trustees it has been determined that all students entering the Rhode Island Normal School hereafter shall be given a series of tests in the elementary subjects, and that serious failure in two or more of these subjects will disqualify for admission. All courses at this school will presuppose a good working knowledge of the essentials. Reviews in these elementary subjects should, therefore, be taken in the high schools rather than in the Normal School.

Tests will be given in the following subjects:

In *arithmetic*, for accuracy and facility in the use of numbers, including simple fractions, decimals, and percentage, and for correct solution of the ordinary problems required of children in elementary schools.

In *English*, for command of correct and clear English and for knowledge of the elements of grammar.

In *history*, for the main facts in the history of Rhode Island and of the United States, and a general ability to give clear and logical answers.

In *geography*, for a general understanding of common-school geography, including location, physical features, climate, industries, and commerce.

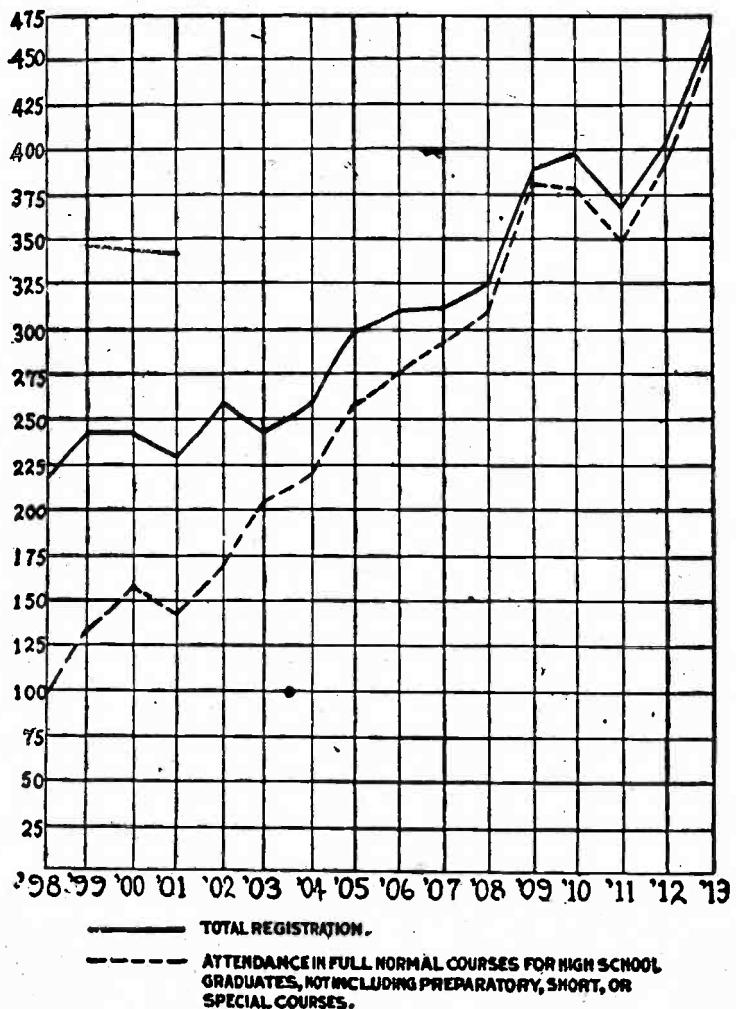
In *drawing*, for nature and object drawing, mechanical drawing, design, and history of art, as indicated in the requirements for this subject.

These examinations will not be severe. They will be designed to test general ability, accuracy of thought, and logical presentation of material, rather than mere memory of fact.

The examinations for admission in September may be taken either in June or in September, on the specified dates. For admission in January they may be taken in June, September, or January. Entrance examinations will not be given at any later dates than those indicated. Students desiring admission must therefore present themselves at one of these regular examinations.

Chart of advancing standards in Rhode Island.—The accompanying chart reproduced from page 24 of the 1913 Rhode Island report shows the change in the quality of the students registered in the normal school. It appears that in 1898 less than half of the students (100 from a total of about 220) were taking the full normal course for high-school graduates. In 1913 practically all of the students were enrolled in this course.

General contrast shown.—The contrast between the conditions described in Idaho, Louisiana, and Virginia, on the one hand, and Massachusetts and Rhode Island, on the other, is a contrast between relatively undeveloped educational situations and highly developed



urban educational situations. As an intermediate example the normal schools of Illinois may be cited.

Illinois represents transition in eliminating high-school students.—In Illinois some of the normal schools enroll a large number of high-school students, while at least one, namely, the De Kalb Normal School, distinctly discourages students of this type from enrolling.

In the 1912 report of the trustees of the De Kalb school we find the situation discussed as follows (p. 5) :

The management has not deemed it wise to attach a high-school department to the normal school. What is known as the "Lindly" law requires the State normal schools to furnish secondary instruction to a certain class of students. The number coming to this school is small, as the policy of advising such students to seek high-school instruction near enough to their homes to permit them to be with their parents has been followed. When they have decided to enter the school, however, their legal rights have been secured to them, but the instruction has been so managed as to prevent any additions to the faculty on their account.

On the other hand, a large number of students of high-school grade are registered in the normal school at Charleston, Ill., which serves a part of the State in which high schools are not so well developed as near De Kalb.

Higher professional requirements for certificates increase proportion of students of college rank.—That the laws governing the certificating of teachers in a given State may have a very large influence in determining the number and grade of the students in the normal schools of the State is shown by the example of Ohio, which has already been mentioned in an earlier chapter (p. 31).

North Dakota.—Another example occurs in the report of the State superintendent of North Dakota for 1910-12, where the conditions in that State are referred to in the following quotation from the report of the normal school at Mayville (p. 216) :

There have as yet been no graduates from either the five-year course for eighth-grade graduates or the two-year course for high-school graduates. The chief reason is that the certification laws of the State do not set a value upon graduation from these advanced courses which is enough higher than that set upon graduation from the four-year and one-year elementary courses to make students desire to take them.

Minnesota.—The increase in the proportion of students taking the courses for high-school graduates which results from increasing the requirements for teachers' certificates is well illustrated in the report of the State superintendent of Minnesota for 1911-12. On page 104 the president of the Winona Normal School writes as follows:

- The two years here reported measure the immediate effect of the amended statute (1900) limiting the value of elementary diplomas to three years without indorsement. During the last two years preceding the passage of the law the per cent of graduates from the advanced course was 42. For the first full two years since the change the per cent in the advanced course is 72.

Similarly the president of the normal school at Duluth writes as follows (p. 111):

The percentage of high-school graduates enrolled and of students electing the advanced courses is larger than ever before. It seems probable that three-fourths to four-fifths of the students entering this school hereafter will be high-school graduates and that practically all will elect the work of the advanced courses.

Combined influence of developing high schools and advancing requirements for certificates.—It is quite evident from the above discussion that the proportion of high-school students in the State normal schools of a community depends to a large extent on the development of high schools in the State and the scheme of certificating teachers. As long as high schools are scarce, pupils who desire work beyond the elementary school will usually be accommodated in the normal schools. As high schools develop, the proportion of such students in the normal schools *may* decrease. Unless the State places a premium, however, on high-school graduates taking advanced normal courses, by granting them superior teachers' certificates, the number of such students in normal schools may not increase rapidly. Where such a situation exists (i. e., no certificating premium) normal-school presidents may continue to accept many high-school students even when the high schools of the community are adequate to take care of them. As soon, however, as a good certification law is passed in such a State, so as to give adequate stimulus to high-school graduates to take a two-year normal course, the normal schools will be so crowded with these advanced students that the normal schools will probably have to get rid of the high-school students in order to accommodate the candidates for graduation in the advanced courses.

Chapter VII.

FACULTIES OF STATE NORMAL SCHOOLS.

Supplements statistical discussions in Chapter II.—A statistical discussion of various characteristics of normal-school faculties is presented in Chapter II. The data given there show the fundamental general facts concerning the size, academic training, duties, and salaries of normal school faculties in the North Central States and provide comparisons with similar facts concerning teachers in colleges and universities in the same territory.

The present chapter will provide a further discussion of the same type of facts. Instead of statistical tables for a given part of the country, however, particular examples will be cited as the basis of interpretative discussion of some of the issues involved.

Need competent teachers with cooperative interest in public-school work.—Among the most important characteristics of a normal-school faculty from the standpoint of serving the purposes of the State in training teachers are (a) the degree of *cooperative interest* manifested by the faculty in the training of prospective teachers for the real, concrete, detailed tasks which they will undertake when they begin to teach, and (b) the competence of the teachers to give such training. Normal-school teachers should be more interested in the regular daily work of public schools than in anything else, and they should be willing and able to cooperate heartily in giving students training for such work. The most important measure of the efficiency of a faculty that is composed of competent individuals is the *extent to which this cooperative interest dominates the work of the normal school*. This could be determined objectively by a study of the productive activities of the faculty and by an examination of the efficiency of students after they enter the teaching profession. A competent observer could find out a great deal through personal observation. Neither the competence of the individuals composing a faculty nor its cooperative interest in normal-school tasks can be fairly judged, as a rule, from printed catalogues or reports or from answers to questionnaires.

Certain objective characteristics easily ascertained from the printed announcements.—There are, however, a number of rather obvious objective facts about the faculties of normal schools which

can be easily determined from printed reports and questionnaires. These are of sufficient interest to persons engaged in normal-school work to justify their compilation. These facts include the number of instructors employed in typical schools and their training and salaries. For the present discussion data have been chosen from a few institutions which are typical of different sections of the country and for which the desired information could be secured from catalogues or other printed material.

Number of teachers. *Large variation in normal schools of Massachusetts.*—It is interesting to note that very great variation may exist in the numbers of instructors employed within the normal schools of a single State. Massachusetts is an example. According to Commissioner Snedden's report for 1912-13, the 10 Massachusetts normal schools employ the numbers of instructors indicated in the following table:

Instructors employed in the Massachusetts normal schools, 1912-13.

Location.	Number of teachers in—		Total.
	Normal school.	Model and practice schools.	
Hyannis	9	6	15
Wentfield	10	14	24
Lowell	11	25	36
North Adams	13	20	33
Fitchburg	14	17	31
Worcester	15	14	29
Salisbury	19	9	28
Boston (Normal Art)	20	6	26
Bridgewater	20	13	33
Framingham	21	11	32

Thus in one State considerable variation is found, namely, from 9 normal-school teachers at Hyannis for an enrollment of 67 students to 21 normal-school teachers at Framingham for 315 students.

Variation in Massachusetts approximates variation in country at large.—There are in the United States only a few State normal schools with staffs smaller than that at Hyannis, and there are not many (apart from the large city training schools) that employ more than 21 teachers for work of strictly collegiate grade with 11 additional critic or model teachers, as is done at Framingham.

Large faculty at Los Angeles (Cal.) normal school.—One of the largest faculties in an institution which enrolls only students of collegiate grade is the one in the State normal school at Los Angeles, Cal. According to the catalogue for 1914, this school seems to have approximately 50 normal-school instructors (not counting student assistants), and 14 teachers in the training school. Three supervisors

of practice teaching are included in the 50. This staff instructed 1,405 regular college students during 1913-14, over 500 of whom graduated during the year from collegiate courses of at least two years in length.

Probably largest faculty is at Ypsilanti (Mich.) normal school.—Perhaps the largest State normal school faculty is that of the institution at Ypsilanti, Mich. This school enrolls about 1,500 students during the regular year, most of whom are of collegiate rank. To instruct these students the institution employs about 80 teachers in addition to some 15 training teachers in the practice or model schools.

Minimum size which may assure adequate specialization in instruction.—The most important aspects of normal-school work which are influenced by the number of normal-school teachers employed in a single school are (a) the cost of maintaining the normal school and (b) the efficiency of the instruction. In order to have efficient instruction, there should be a certain degree of specialization by the teachers. For example, the most efficient instruction can not be secured where one teacher teaches such unrelated subjects as psychology, English, and penmanship; another, natural science, English, and sewing; and another, natural science, agriculture, and civics, as is the case in one small normal school. Even more varied assignments are found in other schools.

Description of theoretical minimum faculty.—In order to secure the degree of specialization which is desirable, how many instructors must be employed for the strictly normal-school courses and the practice teaching in an institution maintaining only two-year courses for high-school graduates? The following list is suggested as a minimum for a small school:

- A. One president, who teaches education part time.
- B. One head of the training school and director of practice teaching, who teaches education part time.
- C. One teacher of history and of the history of education.
- D. One teacher of geography and nature study.
- E. One teacher of English.
- F. One teacher of mathematics.
- G. Part time of one teacher in each of the following subjects, who also teaches his or her subject in the model and practice school:
 - Art.
 - Music.
 - Manual training.
 - Home economics.
 - Physical education.
- H. One critic teacher and managing principal of the practice school.
- I. Four additional critic teachers who have charge of groups of children in the practice school and of groups of practice teachers.

This makes a total faculty of 16, divided as follows:

	Teachers.
Full time to normal school (including the president and the director of the training school)	6
Part time to normal school and part to practice school	5
Full time in practice school	5
 Total	 16

This faculty could teach 150 to 175 students.—Such a faculty could probably teach efficiently 150 to 175 students in a standard, general, two-year course for high-school graduates and 200 children in a practice school, and not be at all overworked. These figures are obtained by estimating that each full-time college teacher should teach approximately as many periods a week as a student recites and that students should be organized into reciting sections of 25 each. On this basis the faculty could take care of approximately as many groups of 25 as there are full-time college teachers, or the equivalent thereof, on the normal-school faculty.

Fundamental points in this estimate.—This tabulation seems so simple and self-evident that certain fundamental points in it may be overlooked. Among these are the following:

1. *A few well-organized courses in education.*—There is relatively small provision for an instructional staff in education (which includes psychology). Instead of many courses in these subjects, there should be offered a few well-organized ones which contain the fundamentals of educational doctrine presented with clear relation to practical teaching situations. Much of the more abstract theoretical material can be omitted. Especially should the fact be emphasized that the traditional devotion to history of education and an abstract course in psychology is open to the gravest objections.

2. *Education taught by practical administrative experts.*—The instruction in education is in charge of the two principal administrative officers, the president of the normal school and the director of the training school. This is also important. Both of these men should be well-informed, general educational experts as well as expert administrators. They should be qualified to select and incorporate in the work in education those discussions that have specific and evident value in improving school practice, and to eliminate all other material.

3. *Teachers of special subjects serve in both normal and training school.*—The teachers of the so-called special subjects (art, music, manual training, home economics, and physical education) serve in both the normal school and the practice school. In almost any small normal school, one teacher to teach each of these subjects in both schools ought to be sufficient. Each teacher, as a rule, should be re-

quired to do this instead of using a part of his or her time in the very expensive instruction of small groups of normal-school students in special curricula. This topic will be discussed more fully in Chapter XIII.

4. *Liberal supply of critic teachers is necessary.*—The provision for the supervision of practice teaching seems liberal, but it is necessary. It is based on the theory that each critic teacher will have charge of 40 children, usually divided into not more than two groups, and that not more than four hours of practice teaching a day will be permitted with each group. By this arrangement each group of children will afford 20 hours of practice teaching a week, or 200 hours of such teaching in a term of 10 weeks. If one group affords 200 hours, the two groups will afford 400 hours per term. If each practice teacher is required to do 100 hours of practice teaching for graduation, the 400 hours afforded by two groups in a term will permit four practice teachers to complete their requirement for graduation in one term. Hence each critic teacher will be able to offer in one term the *complete amount* of practice teaching required by four students. In three terms (or the full regular year) on this basis she could provide the amount of practice required for 12 students. Hence each critic teacher can train 12 practice teachers a year.

Hence the five critic teachers provided in the faculty outlined above could take care of 60 practice teachers annually, which is the probable number of graduates in a two-year course for high-school graduates which enrolls from 150 to 175 students. A proportionate increase in critic teachers is necessary as the number of students increases.

Cost would necessitate reduction of above faculty in a very small school.—The above discussion of the minimum faculty for a small normal school has been organized primarily from the standpoint of efficiency in instruction. The element of cost in instruction is a more complicated item to consider. Obviously, if the normal school were so small that it could not employ each of the above college instructors approximately 20 hours a week in teaching students in groups of 25 each, the number of instructors should be reduced, with a corresponding reduction in the degree of specialization permitted. This would probably decrease the efficiency of the instruction somewhat, but such a decrease must be contemplated where normal schools are so established that they can not secure the best number of students for both economical and effective instruction.

Training of normal-school teachers. Public-school experience, academic training, professional training.—The second aspect of normal-school faculties to be considered is the nature of the training of the individual members. Three obvious items enter into this consideration of training; namely, (1) experience in public-school work,

(2) academic work in their special departments, (3) professional training in their special departments.

Normal-school instructor's work centers in course of study of local public schools. Large possibilities.—It is highly important that the detailed concrete nature of the task of a normal-school departmental instructor be kept constantly in mind. The beginning and end of his endeavor should be the course of study in his particular subject in the community (usually a State or district) where the normal school is located. Specific growth in power to teach this course of study should be secured in his normal-school students. All materials and methods which are used should be definitely selected because they introduce students to practical teaching processes that they can carry out with classes of the size and type that they will have in the public schools. While this may seem to offer a narrow and unattractive outlook to the normal-school instructor, as a matter of fact it opens up such large possibilities in the way of preparing textbooks and materials for use in the grades that few instructors measure up to its possibilities. Many who hold normal-school positions consider themselves too big for this type of detailed work, and are inefficient as a consequence.

Best combination of characteristics for successful instructor.—There can be very little doubt that intimate contact with the problems of public-school teaching is the best possible training for the normal-school teacher. In general, such contact is more readily and satisfactorily obtained through teaching experience in the public schools. In some cases careful scientific observation of school practices may serve to give the requisite training, but in ordinary cases such observation is not adequate in duration or intimacy to give the preparation necessary.

Parallel with practical experience and no less important is thorough training in subject matter and in the fundamental principle of the science of education. There can be no doubt that the tests of intellectual competency have sometimes been neglected in the selection of normal-school teachers. It would be a mistake to omit contact with schools; it is equally a mistake at this time, when education is being studied from the point of view of science, to fall short in rigid scientific standards.

Salaries. Relative salaries most important.—As a final aspect of the faculties of normal schools, we shall consider briefly the matter of salaries. Here again the gross salaries paid are not so important as certain relationships between the salaries of different officers within the same normal school and certain matters of per capita cost, which will be taken up in the next chapter. However, in order to make concrete some of the relationships which we desire to discuss, we shall present certain data concerning the actual salaries paid.

Massachusetts salaries typical of well-developed system.—For the Massachusetts normal schools the situation with regard to salaries of instructors is discussed by Commissioner Snedden in his report for 1912-13 in the following paragraph (p. 85):

At the outset of their work in the normal schools their salaries have not been large—about \$1,000 per year for women and from \$1,500 to \$1,800 for men. The maximum salaries available—usually after many years of service—are \$1,200 and occasionally \$1,500 for women, and \$2,000 to \$2,500 for men.

The above salaries are probably for the regular academic year, not including summer instruction:

Idaho salaries typical of small young school.—A typical schedule for a small school is that for the State normal school at Albion, Idaho. It occurs in the report of the school for 1911-12 and does not include summer instruction. It is as follows (p. 30):

INSTRUCTORS' PAY ROLL, ALBION (IDAHO) STATE NORMAL SCHOOL, 1912-13.

President	\$3,875
Dean, science	2,000
Supervisor training, education	2,000
German, Latin	1,500
English	1,200
Mathematics, dean of men	1,200
History	1,815
Agriculture, director of athletics	1,200
Manual training	1,200
English, dean of women	1,200
Drawing, librarian	750
Music	1,100
Domestic science	1,200
Grammar-grade critic	1,000
Intermediate-grade critic	1,000
Second-primary critic	1,000
First-primary critic	1,200
Total	28,440

It will be noticed that this faculty approximates roughly the theoretical minimum small faculty outlined earlier in the chapter.

Michigan normal-school salaries average high.—As a third example the salary schedule of the State normal school at Mount Pleasant, Mich., is given. This seems to include summer instruction in the annual salaries. It is fairly typical of the salaries in the Michigan State normal schools and is printed along with those of the other schools in the 1912 report of the State board of education (p. 59).

STANDARDIZING STATE NORMAL SCHOOLS.

Salary schedule, Central Michigan State Normal School.

Members of faculty.	Schedule of salaries, 1912-13.	Proposed salaries for 1913-14. Duplicated 1914-15.
President.....	\$3,500	\$3,500
Head of department:		
Literature and English.....	2,400	2,500
Mathematics.....	2,300	2,200
Geography.....	2,400	2,500
History and civics.....	2,400	2,500
Superintendent of training school.....	2,300	2,500
Psychology and pedagogy.....	2,400	2,500
Music.....	2,200	2,200
Physiology and physical training.....	2,200	2,400
Reading and public speaking.....	2,200	2,400
Physics and chemistry.....	2,200	2,400
Agricultural education (new).....	2,200	2,400
Agriculture and nature study.....		2,500
Latin and German.....	1,900	2,000
Drawing.....	1,800	1,900
Biology.....	1,700	1,900
Kindergarten.....	1,200	1,200
Women's dean.....	1,200	1,500
Rural schools (new).....		2,000
Total.....	36,100	42,600
Instructors:		
Psychology and education.....	1,400	1,500
Physical education.....	1,400	1,500
Physical training (women).....	1,200	1,200
Drawing.....	1,200	1,200
Mathematics.....	1,200	1,200
History and civics.....	1,200	1,200
Latin and German.....	1,150	1,200
English.....	1,150	1,200
Domestic science and art.....	1,100	1,200
Manual training.....	1,100	1,200
English grammar and rhetoric.....	1,200	1,500
Music.....	1,200	1,200
Supervisor of drawing, training school.....	1,000	1,100
Harmony and accompanist.....	500	500
Total.....	16,000	16,900
Critic teachers:		
First grade.....	1,200	1,200
Second grade.....	1,050	1,100
Third grade.....	1,200	1,200
Fourth grade.....	1,050	1,100
Fifth grade.....	1,200	1,200
Sixth grade.....	1,200	1,200
Seventh grade.....	1,050	1,100
Eighth grade.....	1,200	1,200
Total.....	9,150	9,300

Large salaries for principal officers at De Kalb, Ill.—A schedule that resembles the Michigan schedules in general range of salaries is that of the State normal school at De Kalb, Ill., except in the following special items, according to the report of the board of trustees for 1911-12 (p. 21) and a letter from the president: The president received an annual salary of \$5,000; the supervisor of training, \$4,500; and the professor of pedagogy, \$3,450. One primary critic received a salary of \$2,000, but the other critics received about \$1,000 each.

An efficient president should have proportionately a very large salary.—Perhaps the most important relationship within the salary budget of a normal school that is worth considering is the rela-

tive amount of the president's salary as compared with those of the other officers. As indicated in our discussion of the control of normal schools, the president is usually the great dominant factor in determining the character of any school. In order to be a striking success, he must be a sort of universal genius as far as the work of elementary schools and normal schools is concerned. He ought to know all about the needs of the elementary schools of the State (as well as the high schools in a few cases), and he ought to be very well-informed concerning just what should be done in each department of the normal school. Furthermore, he ought to be able to select instructors who are competent to do their special tasks as described on page 42 and to see that they succeed. With the exception of the director of the training department, it would appear that the position of any other member of the faculty is relatively insignificant as compared with that of the president. In fact, in many schools, the vacating of the instructorships in some departments for several years would have little effect on the efficiency of the graduates of the school. In view of these facts, if the president of a normal school is the type of efficient person postulated above, he deserves a relatively large salary as compared with members of the faculty. As an *educational* officer he is a much more important leader than the president of a college or small university, although as a *financial* officer he may not be so important.

Good critic teachers highly important; should command good salaries.—The other relationship between salaries within a given normal school which we shall consider is between the salaries of the critic teachers and the salaries of the departmental instructors or professors. The point of departure for our consideration here is the fact that every normal-school graduate who has had the good fortune to teach for 100 hours under the careful supervision of a superior critic teacher has probably profited more in terms of efficiency from this experience than from any 1,000 hours of departmental instruction in the normal school. This being the case, it is highly important that sufficient money be set aside in the budget for salaries of critic teachers to secure such superior supervision for all prospective graduates.

Good critic should receive superior grade-teacher's salary, plus training salary.—Just how this should be paid to individuals involves a variety of considerations which we can not carry through to their logical conclusion here. For example, to begin with, a superior critic who is teaching 40 children would probably receive \$800 to \$1,000 in a good city system simply for teaching the children. Hence, this item ought to be assumed as a part of fundamental training school maintenance to begin with. The question then arises, How much should

she be paid in addition as a factor in the training of normal school graduates? Since she can train only about 12 graduates a year, this becomes a question of how much the school is willing to pay for a service which, as postulated above, is more valuable than any other service in the school, but is rendered to only a few students. We shall not attempt to give a precise answer to the question which we have raised, but shall say in general that some normal schools would greatly increase their concrete effectiveness by subtracting money from the salaries of departmental instructors and using it to increase the effectiveness of the supervision of practice teaching.

Chapter VIII. NORMAL-SCHOOL COSTS.

Reliable per capita costs commonly used now in public schools are needed in normal schools.—During the last 15 years the development of a standard technique for measuring per capita costs in elementary schools and high schools has made available each year a body of reliable, precise information concerning expenditures in public schools. School officials find this information of very great value in studying problems of maintenance and expenditure. It is perfectly possible and highly desirable to develop the same type of measurements and technique in State normal schools. Normal-school presidents frequently attempt to make such calculations by using data published in the tables in the reports of the United States Commissioner of Education. The calculations and the comparisons based on these are usually not valid, however, because the original data do not permit of the calculation of reliable comparative conclusions of the type indicated.

Comparative per capita data of 10 Massachusetts schools furnish excellent examples for reliable comparisons.—An excellent beginning in the calculation of comparative unit costs in State normal-school maintenance has been made by Commissioner Snedden, of Massachusetts, with the annual expenditures of the 10 State normal schools of that State. The carrying out of the scheme involves (1) the development of uniform methods of *accounting* which analyze expenditures into fundamental items which are worth measuring, and (2) the development of uniform, standard methods of measuring *attendance* in terms of average membership for the year. Both of these items are clearly evident in the Massachusetts tables which are printed in the annual report of the State board of education for 1912-13 (pp. 19 and 192-194) and are reproduced below:

Massachusetts normal schools—Teachers, admissions, attendance, etc., for the school year ending June, 1913.

Location.	Teachers in—				Total enrollment of students in normal schools, September, 1912, to June, 1913.	New students admitted to normal schools in model and practice schools.	Graduates from normal schools in June, 1913.
	Normal schools.	Model and Practice schools.	Men.	Women.			
Bridgewater.....	9	11	1	12	32	342	157
Fitchburg.....	7	9	5	43	604	136	128
Framingham.....	14	14	11	11	233	135	133
Hyannis.....	6	6	4	1	211	211	103
Lowell.....	4	7	2	24	13	1,154	66
North Adams.....	4	9	1	20	1	1,044	81
Salem.....	8	11	2	7	26	1,152	70
Westfield.....	6	4	1	13	209	575	65
Worcester.....	9	9	14	3	12	485	102
Boston (Normal Art).....	14	6	6	1	58	267	90
Total	66	86	17	118	176	2,253	4,745

¹ Not including 390 students in the summer session.

² Not including 51 students in correspondence course.

³ Not including 96 evening-school students.

⁴ Figure in printed report changed.

Expenditures of Massachusetts State normal schools in 1912-13 for salaries, wages, and labor.

Location.	Cubic contents of buildings, 1912-13.	Average membership, 1912-13.	Normal school.	Per capita.	Training school.	Per capita.	General administration.	Per capita.	Total.	Per capita.	Salaries, wages, and labor.
Bridgewater.....	1,776,381	360	\$80,057.21	\$83.49	\$67,997.68	\$19.44	\$10,250.08	\$28.42	\$147,284.95	\$131.34	.....
Fitchburg.....	1,349,631	269	19,975.00	74.25	21,705.94	1.80	6,063.90	26.26	45,714.55	131.21	.....
Framingham.....	738,380	306	25,551.65	83.50	6,320.78	22.29	6,957.67	22.74	39,330.10	128.63	.....
Hyannis.....	447,488	106	13,659.18	136.59	2,611.52	25.18	3,117.23	31.17	19,283.90	102.94	.....
Lowell.....	625,041	148	17,474.16	118.07	4,832.50	32.65	4,219.78	28.51	26,526.44	170.23	.....
North Adams.....	937,672	127	15,519.38	122.20	6,952.90	54.75	5,887.45	46.36	28,359.73	223.30	.....
Salem.....	979,716	321	26,996.37	84.10	6,506.88	17.47	4,772.48	14.87	37,375.53	116.43	.....
Westfield.....	1,077,881	200	1,344.64	71.72	6,719.88	32.80	5,008.73	25.04	26,073.25	130.37	.....
Worcester.....	610,452	290	19,210.31	98.05	2,533.39	14.17	3,782.51	18.91	25,926.18	129.13	.....
Boston (Normal Art).....	597,519	337	22,351.65	98.06	8,221.65	6.59	5,485.29	16.28	45,055.61	116.87	.....
Total	8,350,157	2,365	214,138.55	.....	67,208.89	.....	56,525.12	.....	328,873.56	.....	.....

¹ Partially offset by amount received from city of Fitchburg.

² Includes 64 students at regular session of normal school (180 days) and 285 students at summer session (5 weeks). Five weeks of summer session equal one-eighth of regular session; one-eighth of 285—35.64—337 average membership.

³ Includes 316 students at regular session (1,190 hours) and 90 students at evening session (80 hours). Eighty hours evening session equal one-fifteenth regular session; one-fifteenth of 316—21+316—337 average membership.

Expenditures of Massachusetts State normal schools in 1912-13 for furnishings, heat, light, power, repairs, improvements, and grounds.¹

Location.	Furnishings.			Heat, light, and power.			Repairs and improvements.			Grounds.		
	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 cubic feet.	Expended.	Per capita.	Per 1,000 cubic feet.
Bridgewater	\$382.60	\$2.45	\$0.50	\$4,345.70	\$12.07	\$12.45	\$6,368.01	\$17.69	\$3.59	\$276.08	\$0.77	\$0.30
Fitchburg	351.28	1.31	.26	4,811.16	17.80	3.67	4,866.22	18.42	3.67	641.57	3.15	1.30
Franklin	453.68	1.48	.61	5,022.32	16.41	6.81	5,858.06	19.14	7.94	460.57	1.93	1.00
Hanover	928.89	9.29	2.08	8,854.06	18.54	4.16	7,245.59	32.46	7.96	688.65	1.69	.12
Lowell	344.19	2.33	.66	4,884.90	6.16	1.71	5,110.18	3.45	2.45	3,385.67	2.61	2.70
North Adams	717.77	6.65	.77	4,506.75	35.49	3.49	3,145.98	24.77	2.45	426.39	3.38	1.41
Salem	1,521.42	4.74	1.65	1,682.70	5.25	1.72	9,162.31	6.74	2.16	152.33	.47	.39
Westfield	737.56	3.99	.72	1,927.46	38.49	7.37	4,001.69	20.01	3.71	29.01	.71	.88
Worcester	952.65	4.77	1.98	1,639.37	8.20	5.442.10	29.21	11.45	150.00	.90	.74	
Boston (Normal Art)	1,454.68	4.32	2.98	1,882.27	4.99	3.21	4,1,803.51	5.35	3.53	.....	.....	.....
Total	8,344.94	.....	.....	34,977.38	.....	.....	37,883.85	.....	2,901.29	.....	.....	.....

¹ For both normal schools and boarding halls.

² No boarding hall connected with these schools.

Expenditures of Massachusetts State normal schools in 1912-13 for supplies and miscellaneous items—Receipts.

Location.	Supplies, normal school.			Supplies, training school.			Supplies, office and other.			Miscellaneous.			Total.		Receipts.	
	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.	Expended.	Per capita.		
Bridgewater	\$3,062.20	\$2.61	\$600.39	\$1.92	\$1,103.06	\$2.06	\$898.78	1,552.19	\$2.36	\$64,861.73	\$1,691.17	.....	.....	.....	\$1,617.10
Fitchburg	2,038.66	7.58	2,192.82	18.15	637.94	2.08	898.98	1,638.33	6.99	60,961.33	125.38	24,133.80	.....	.....	1,004.68
Franklin	1,077.32	9.82	107.00	.35	622.08	6.22	618.72	1,149.92	6.19	27,822.38	276.28	750.11	.....	.....	1,004.68
Hanover	954.13	9.54	42.50	.43	483.93	3.77	451.98	3.05	1,149.92	7.77	32,941.16	222.58	105.00	1,004.68
Lowell	1,194.45	14.83	483.93	1.13	467.94	4.46	804.03	6.38	6.33	41,171.83	324.19	2,349.83	.....	.....	1,004.68
North Adams	1,627.91	12.52	1,113.49	1.61	788.66	2.46	1,445.94	4.50	4.50	49,113.09	153.00	844.82	.....	.....	1,004.68
Salem	3,467.19	10.80	204.13	1.02	891.88	4.46	849.29	4.25	4.25	43,496.36	217.48	664.94	.....	.....	1,004.68
Westfield	3,676.62	12.39	15.16	.71	1,000.69	7.50	1,371.94	6.96	6.96	40,324.77	201.62	206.09	.....	.....	1,004.68
Worcester	3,000.32	15.16	1.71	.01	819.88	2.43	665.40	2.06	2.06	47,901.92	12.19	3,701.26	.....	.....	1,004.68
Boston (Normal Art)	1,888.01	4.12	.....	.....	.....	.....	10,363.50	.....	.....	469,346.07	.....	.....	35,865.83	.....	.....
Total	23,144.85	.....	5,352.88	.....	7,871.87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Partially offset by amount received from city of Fitchburg.

² Includes \$2,900 expended for correspondence course.

Other normal schools can parallel Massachusetts data.—It is an easy matter for any normal-school official who has some understanding of statistical methods to proceed to secure parallel data for his own school and to work out similar per capita costs. The types of bookkeeping sheets to be used could be devised by reference to the headings of the columns in the Massachusetts tables. Moreover, in view of the general importance of the issues involved, Commissioner Snedden would probably be glad to send sample accounting pages to any normal-school president who desires to develop a parallel accounting system for his own school. In a letter to the authors, Commissioner Snedden states that it is the intention of the department to improve on certain details of the method, and not to publish the data every year.

Special notes on certain items in the tables.—Probably the only items in these tables that need any special explanation are the following: On page 76, under salaries, wages, and labor, the item "general administration" should be explained so as to indicate whether it includes the principal's salary and the salaries of clerks, janitors, librarians, etc. The items "normal school" and "training school" under this general heading may include only salaries paid for instruction. Another item that needs explanation is the item "receipts" in the last column on page 77. This seems to include all receipts by the normal school of funds other than those furnished by the State, excepting fees for room and board.

For comparative purposes other schools should reduce costs to 36 or 40 weeks basis.—In comparing the per capita costs in his institution with those in the above tables, any normal-school official must keep in mind that the above per capita costs represent the costs for *one student of collegiate grade during one regular academic year of approximately 36 or 40 weeks*, not including the summer term. In normal schools where a large number of the students are of high-school rank, this fact should be taken into consideration. In schools where summer terms are maintained and the summer budget is a part of the regular annual budget, these facts must be allowed for.

Chapter IX.

GENERAL COURSES OF STUDY FOR HIGH-SCHOOL
GRADUATES.

Differentiated general courses for high-school graduates.—The discussion of the courses of study of normal schools is complicated by the fact that some institutions offer so many different courses of study; for example, one excellent institution outlines 13 in its catalogue. This is probably necessary in schools where students are received at any stage of schooling from the first year of high school to the second year of college, and where several courses of study are offered for teachers of special subjects. In normal schools which maintain only two-year courses for high-school graduates there are two standard general courses which most of the students follow, namely, the course for kindergarten-primary teachers and the course for intermediate and grammar-grade teachers. Only these two courses will be discussed in this chapter. Courses for prospective teachers of special subjects will be discussed in Chapter XIII.

Recent differentiation of courses for teachers of lower grades and upper grades.—The differentiation of the two-year general courses for high-school graduates into those for teachers of the lower grades and those for teachers of the higher grades is a relatively recent innovation. For a long time in many schools one standard general course was taken by all prospective elementary teachers, regardless of whether they expected to teach in the lower grades or the upper grades. This single course was made up of some work suited to primary teachers, some to upper-grade teachers and some of a general character often not suited to either. For example, the courses in the teaching of reading and handwork usually emphasized the work of the primary grades, the courses in geography and history were especially related to upper-grade work, and the psychology and history of education were not related to either.

More specific aims and training now being emphasized.—The differentiation of the two general courses is part of a movement to provide for more definite and specific purposes in normal-school training. The problem of training a teacher for the first three grades of the elementary school becomes a perfectly definite one when carefully studied and analyzed. Two years is a short time in which to prepare a high-school graduate adequately for such work; hence

there should be definite assurance that everything included in the course has *specific* value in improving the practice of primary teachers, and no important aspect of the work of such teachers should be omitted from the training. The same things are true of the course for upper-grade teachers, but here it is even more difficult to give adequate training in two years; hence several of the more highly developed normal-school systems are gradually making a transition to three-year courses for high-school graduates who expect to teach in the upper grades.

Specific training emphasized by Morrison.—The importance of *specific* purposes is often overlooked by normal-school authorities, more especially by the departmental instructors; hence it will be given special emphasis here by means of quotations from the discussions of State Supt. Morrison, of New Hampshire, and Commissioner Snedden, of Massachusetts. In an earlier chapter on normal-school control the part played by Supt. Morrison in modifying the work of the New Hampshire normal schools was described (see p. 48). In his report for 1911-12, in discussing the modifications introduced in the course of study, he says (p. 152):

In the last biennial report of this office the theory under which the training process was [formerly] administered was explained. In brief, individual freedom and general development were emphasized, and specific training in methods and school management minimized. This conception of the training process was common to both schools, and a reversal of the process has taken place in the two schools simultaneously. The theory had come to break down in practice. Graduates were found to have acquired considerable general ability as teachers, and after a time, under the oversight and instruction of a superintendent, acquired facility in schoolroom routine. They did not learn how to teach and how to handle a school.

A program has been prescribed by the trustees calculated to give specific and definite training for teaching in the elementary schools of this State. The State course of study is made the basis of instruction in methods, and the same is made the course of study in the model and practice schools. Thus, the students under training are made familiar from the outset with the line of work which they must carry out as teachers. It is further provided that each student before graduation must "make good" by teaching one-half of each school day for 18 weeks in the practice schools, being responsible for the conduct of classrooms for that time.

The principals have faithfully carried out this program.

It is too early to report definitely upon results, since at the time of writing the graduates have taught for less than six weeks. We are, however, informed by the superintendent of schools in Manchester that the seven graduates of the Plymouth class of 1912, now teaching in that city, have shown marked and unusual capacity in the schoolroom. There is nothing peculiar in this case, and no doubt substantially the same report would come from the majority of the graduates of 1912 at both Plymouth and Keene.

It is obvious from this report that vague general purposes and training have been replaced by specific purposes and training in the New Hampshire normal schools.

Need of more specific aims emphasized by Snedden.—One of the best discussions of this general policy and of the general principles that should govern the organization of normal-school courses of study and instruction is found in Commissioner Snedden's elaborate report for 1912-13 on the Massachusetts normal schools, which has been quoted many times in this bulletin. In his conferences with the principals and faculty representatives of the 10 normal schools, the following propositions were made the basis of the discussion so far as it affected the course of study:

1. The purpose of each type of instruction and training offered in the normal schools shall be more effectively defined.
2. Normal-school training should be effectively correlated with the educational practices in town and city schools.
3. Certain of the professional subjects, especially psychology and the history of education, should be more effectively taught, if they are to justify their presence in the curriculum.
4. There is need of a clearer understanding of the needs, limitations, and possibilities of typical normal-school students.
5. The professional training given by the normal schools should be differentiated according to the probable field of service in elementary schools to be entered by the prospective teacher.

Trenton principal emphasizes clear defining of normal-school methods.—This necessity of a more careful determination of specific values in normal-school courses of study was frequently referred to in letters to the authors from normal-school authorities. Thus, the principal of the State Normal School at Trenton, N. J., wrote as follows:

I can see how a request sent to normal schools asking them to define the points in which their work differed from the usual academic work—in other words, asking them to define their methods—would be of very great interest. I think the general mind is muddled concerning what is peculiarly normal.

Oshkosh principal emphasizes differentiated departmental courses.—Along the line of more careful determination of the specific values of normal-school courses and differentiation accordingly, the principal of the State Normal School at Oshkosh, Wis., wrote as follows:

I consider it quite essential to find out, first, the extent to which the course of study is adapted to the prospective needs of different groups of teachers; that is, the amount of real differentiation there is in it—does everybody have the same geography or is the geography differentiated?—because the extent of this differentiation is a measure of the extent to which serviceable subject matter and most highly serviceable methods are taught.

History of development of differentiated courses in Wisconsin.—The historical development of the point of view which emphasizes specific professional training in the normal-school courses of study, instead of general high-school or collegiate training, is summarized

for the State of Wisconsin in the following quotation from the bulletin published by the board of regents of the normal schools of that State (March, 1915). This number of the bulletin is devoted to the organization of differentiated courses in the normal schools. The historical change from short review courses to general cultural courses, and later to the vocational-professional courses, is described by Secretary Kittle in the following words:

THREE TYPES OF NORMAL SCHOOLS.

1. The early normal schools, from 1866 to 1895, offered what were called reviews or general reviews. They gave 5-week courses, 6-week courses, and 10-week courses in the common branches—arithmetic, geography, history, and grammar. They organized and formulated these into a body of common knowledge.

In this policy, psychology and pedagogy played a most important part. The leading man in these two subjects was called the institute conductor. It was his work to organize the subject matter of the general reviews and to formulate the principles of teaching, and then to extend such work into the county institutes. These reviews and the pedagogy then appeared in the classroom work of the public schools and in the county superintendents' examinations for teachers. Hence the early normal school centered in reviews and pedagogy and psychology on a practical basis.

2. Some time prior to 1900 a new movement began in the normal schools of Wisconsin. An increasing number of teachers, direct or nearly direct, from the colleges and universities began to be employed in the normal schools. Most of these were well qualified to offer broad general courses in their chosen subjects, like the courses in the very best high schools. Many were well qualified and wished to offer intensive courses like those given in a college or a university. These teachers brought scholarship and breadth of view in the normal schools. But they transformed the normal school more and more into a high school with some college work. The colleges and universities in the decade from 1900 to 1910 have served as huge magnets to deflect the normal school from its own special field of service. Under these combined influences the normal school became partly the old-time normal school, partly the modern high school; and partly the college or university.

3. The new type of normal school is emerging. It is based on the principle that the normal school is a vocational school; that it is the best instrument for training kindergarten teachers, primary teachers, and grammar-grade teachers; that it may be used to train certain high-school teachers and special teachers; that its course of study and classroom instruction should be differentiated for special lines of service.

Desire for college credit should not eliminate valuable courses.—One of the factors that interfere with normal-school courses being limited to instruction that is specifically helpful to prospective teachers of certain grades is the desire to secure college or university credit elsewhere for all of the work that a student has taken in the normal school. Since universities may hesitate to give credit for such courses as "handwork for the primary grades," or, "arithmetic for the upper grades," normal-school students who are ambitious for college credits may neglect to take these courses, although they may be important in their future teaching. In Wisconsin, where academic

junior college courses have been organized in the normal schools, this danger is appreciated and is commented upon in the following quotation from the 1914-15 catalogue of the Milwaukee State Normal School:

All the courses in the normal school (with the exception of the college course and certain courses in the school of fine and applied arts) are designed to fit teachers for the schools of Wisconsin. The school is essentially a vocational school. The studies in the normal courses are selected for the value they are believed to have for prospective teachers, rather than for their quality of pleasing students or enabling the students at some future time to obtain credit at college for them. Incidentally, the work done at the normal school may, most, if not all of it, be made to count on a future college course for those students, and it is hoped there may be many who wish to continue their studies; but it is believed that normal students are serious-minded young people who know the purpose of a normal course and are willing to do what will best fit them for the work they propose to undertake.

Departmental courses differentiated for primary grades and upper grades.—When one compares the differentiated courses of study for primary teachers and upper-grade teachers, it may be found that they are very much alike in the general statement of the amount of work required in each department, but that the departmental courses are differentiated for the teachers of different grades. The latter differentiation is well illustrated in the catalogue of the Platteville (Wis.) State Normal School for 1914-15. For example, in the English department appears "Juvenile literature required of all who are preparing to teach in the primary grades," and "American literature required of all students who are preparing to teach in the upper grades." Another course is "Geography for lower-grade teachers," and "Geography for upper-grade teachers"; there are also similarly differentiated courses in history, manual arts, mathematics, psychology, and education.

Electives should be restricted to courses specifically preparatory to grade of teaching elected.—If it is true that two years beyond high-school graduation is a short time in which to train a prospective primary teacher well, and three years is probably necessary for training an upper-grade teacher, as postulated earlier in this chapter, the question arises whether any electives should be permitted in such courses. It is quite obvious that the question at issue concerning electives in such highly differentiated and specifically vocational courses as those described above is quite different from the question at issue in the organization of general courses of study in high schools and colleges. Confusion of these two types of situations has often led to the allowing of a considerable range of election in normal-school courses where there is no good reason to justify it. In general, when a student is specifically preparing himself for teaching in certain grades of the elementary schools, and is permitted to elect some of his courses, the following restrictions should

prevail: It should be assured (1) that he is neglecting no phase of the elementary-school course of study for which he needs training; (2) that all of the courses which he elects do give specific training for the grade of teaching that he expects to undertake; (3) that his elections have the approval of a competent faculty adviser who is free from departmental prejudices and bias.

Lack of common units makes statistical statements unreliable.—It was originally intended in this chapter to make a strong feature of a statistical table showing the percentages of the time devoted to the various subjects in the general two-year courses for high-school graduates in a large number of normal schools. Upon a careful study of normal-school catalogues, however, it became evident that an extensive and *reliable* study of this sort would be difficult to make from the available data. In the first place, some normal schools print no tabulated statement of their requirements for graduation. Others print a statement of the number of hours per week, but do not distinguish between laboratory or shop work on the one hand and "prepared" work on the other. In some such cases, if the item "Drawing * * * 3 hours," appears, it may mean any one of the following: (a) Three hours of studio work with outside preparation; or (b) three hours of studio work with no outside preparation; or (c) three double periods of studio work with outside preparation; or (d) three double periods of studio work with no outside preparation.

In some cases the catalogues state the requirements for graduation in terms of "units" or "credits." In such instances a reader may feel reasonably sure that the recitation and laboratory or shop hours have been reduced to a common basis for credit.

The point under discussion is especially important in connection with the requirements in the fine and industrial arts and in music. The large variation shown in the percentages of such work required in different institutions and printed in the table on page 85 is probably due to the fact that in many of the higher cases the *time* hours were not reduced to credit hours in preparing the statements published in the catalogues, and in the lower cases they were. Hence, the calculations are probably reliable only in cases where the catalogues give the requirements in terms of units or credits, as at Ypsilanti, Mich., and Terre Haute, Ind.

A suggestive table of time distributions is provided.—After considerable unsuccessful endeavor to secure extensive, reliable calculations in spite of the difficulties mentioned above, it was decided to attempt such calculations in the cases of only a few schools and to submit the results as a sample of what is possible under present conditions. These results are shown in the tables on page 85. The experience in making them suggests the desirability of each State normal school formulating its units of credit and requirements for

graduation in well-defined, unequivocal terms, such as the high-school unit, or the quarterly credit hour, or the semester credit hour.

Percentages of graduation requirements from the two-year courses for high-school graduates in certain State normal schools.

[Based on gross data shown in table.]

Subjects.	Westfield, Mass.	Brockport, N.Y.	Newark, N.J.	Ohio (4 schools)	Terre Haute, Ind.	De Kalb, Ill.	Ypsilanti, Mich.	Madison, S. Dak.	Springfield, S. Dak.	Hays, Kans.	San Diego, Cal.	East Tennessee.	Harrisonburg, Va. ¹⁰
Education.....	10	14	15	22	16	16	29	34	19	12	23	28	22
Practice.....	10	27	28	14	8	15	8	15	8	0	8	4	12
History.....	4	4	5	6	8	6	8	7	3	0	0	0	x
Geography.....	5	5	5	8	8	3	4	4	3	0	5	0	3
English.....	10	14	13	14	20	14	13	7	13	6	10	11	17
Science.....	11	5	12	5	8	13	4	13	11	13	5	0	6
Mathematics.....	6	6	6	8	8	11	4	11	4	13	13	0	0
Undistributed special methods.....	9	0	0	0	0	0	0	0	0	0	0	4	0
Manual and fine arts.....	16	18	11	3	12	5	8	6	19	8	2	0	10
Music.....	7	4	5	3	0	4	5	0	0	0	0	0	6
Physical education.....	4	5	5	3	4	5	0	0	29	19	7	52	0
Electives.....	0	0	0	20	4	8	33	0	19	0	0	0	0

Requirements for graduation (percentages) from the two-year courses for high-school graduates in certain State normal schools.

[Gross data as derived from catalogues reduced to percentages in table.]

Subjects.	Westfield, Mass. ¹	Brockport, N.Y. ¹	Newark, N.J. ²	Lower Ohio (4 schools) ^{3,4}	Terre Haute, Ind. ⁵	De Kalb, Ill. ⁵	Ypsilanti, Mich. ⁵	Madison, S. Dak.	Springfield, S. Dak. ¹	Hays, Kans. ⁶	San Diego, Cal. ⁷	East Tennessee. ⁸	Harrisonburg, Va. ¹⁰
Education, total percentages.....	14	16	17.5	14	4	4	4	38	41	12	10	34	35
Distribution:													
Psychology.....	6	5	8	3	2	12	2	5	10	...	8	...	...
Pedagogy.....													
History of education.....	4	5	5	3	1	9	1	10	5	...	4	5	6
School management.....													
Child study.....	4		2	2				3					
Principles of teaching.....									10				
Principles of education.....									8				
Educational psychology.....									5				
General method.....									5				
Administration and organization.....									1				
Logic.....									3				
Ethics.....									3				
Educational sociology.....									2				
Practice, etc., total percentages.....	23	30	30	9	2	20	2	20	15	4	19	5	19
Distribution:													
Teaching.....	23	24.5	6	2	20	2	20	2	15	4	15	...	16
Observation.....		1.5	3										
Conferences.....		30											
Observation and practice.....													
History and social sciences, total percentages.....	8	4	5.5	4	2	8	1	10	2	...	7	...	13

¹ Periods per week per term.

² Periods per week per semester.

³ Requires some additional work in rhetoricals and essays, time not specified.

⁴ Computed for course for teachers in upper grades, as given on page 63 of the normal-school bulletin issued by the State department of public instruction.

⁵ Unit of credit based on completion of term's work in subject.

⁶ Requires additional work in school management from students expecting to become principals.

⁷ Additional requirements in music, penmanship, and physical training, time not specified.

⁸ A requirement in physical culture, time not specified.

⁹ Computed for course for teachers in upper grades.

¹⁰ Education (page 24 of catalogue) is assumed to include 4 hours of required practice (page 30).

Requirements for graduation (percentages) from the two-year courses for high-school graduates in existing State normal schools—Continued.

Subjects:	Westfield, Mass.	Brockport, N. Y.	Newark, N. J.	Lower Ohio schools	Terre Haute, Ind.	De Kalb, Ill.	Ypsilanti, Mich.	Madison, S. Dak.	Springfield, S. Dak.	Fort Hays, Kans.	San Diego, Cal.	East Tennessee.	Harrisonburg, Va.
Distribution:													
United States history.....	4	4	5.5	4	2	8	1						5
General history.....	4												
Contemporary history.....													
Statutory.....								1	2				
Civics.....								4				3	
Sociology.....							5					5	
Economics.....													
Geography, total percentages.....	7	5	6	4	2	4	1	5	3			6	
English, total percentages.....	11	15	11.5	9	6	18	3	9	7	4	8	12	26
Distribution:													
Reading, phonics.....		5	3.5	2	2	6	1	4	2				6
Spelling.....			3										
Grammar.....				7	2	4	1	5	5				
Composition.....	3	3	5		1	1	1						
Language.....												10	
Literature.....	5	5	5			4						10	
Rhetorike.....												8	
Expression.....	6		2.5									4	
Undistributed.....													
Sciences, total percentages.....	16	5	13.5	3	2	17	1	17		8	9		14
Distribution:													
Nature and elementary science.....	12	5	1.5									2	9
Physiology and hygiene.....			2		2		1	3				4	5
Agriculture.....			2										
Biology.....			5		3		12	0				3	
Physics.....						5							
Chemistry.....	4												
Applied science.....			3										
Mathematics, total percentages.....	9	6	5.5	4	2	11	1	14	6	8	4		10
Distribution:													
Arithmetic.....	0	6	5.5	4	2	4	1	6	5	5	4		10
Algebra.....													
Geometry.....													
Trigonometry.....													
Undistributed:													
Special methods, total percentages.....	12								5			5	
Manual and fine arts, total percentages.....	22	18	12.5	2	3	6	2	8	6	12	7		15
Distribution:													
Drawing.....	12	8	2	2	1	6	2	3	6		5		6
Pennmanship.....			2.5		1								
Manual training.....	0	8	8		1			3			2		6
Domestic science.....					1								
Sewing.....	4												
Art appreciation.....												3	
Musie, total percentages.....	10	6	4	0	1	6	0	4	6	0	3	2	0
Physical education, total percentages.....	6	6	6	2	1	6	0	0	2	7	0	10	
Electives, total percentages.....	0	0	0	13	1	10	8	0	36	12	6	62	0
Total requirements, percentages.....	141	111	116	64	25	130	24	130	120	82	84	120	156

Chapter X. THE ORGANIZATION OF PRACTICE TEACHING.

Further discussion of practice teaching facilities.—As intimated a number of times in this bulletin, the organization of practice teaching probably constitutes the most important single phase of the actual training of teachers by normal schools. In view of the importance of the work, Chapter V was entirely devoted to the discussion of the facilities for practice teaching in any given community as a factor in determining and limiting the extent to which a normal school established there could serve the State by training teachers. This involved an elaborate analysis of the amount of practice teaching to be required, the conditions under which it should be carried on, and standards for measuring the amount which a given number of children might afford. The essential points were (1) that a large part of the practice teaching should be done under regular school conditions and (2) that every prospective teacher should do from a minimum of 100 hours to a maximum of 90 half days of actual teaching. Again, in the chapter on normal-school faculties, the number and salaries of the critic teachers were discussed with emphasis on the very great importance of the latter in really improving the efficiency of prospective teachers.

Four factors to be considered in this chapter.—The present chapter will take up a consideration of the actual organization and conduct of practice teaching. The most important factors in this organization are (1) the director of the training school and his staff of critic teachers, (2) the detailed printed course of study of the training school, (3) the practical and differentiated character of the departmental courses in the normal school in relation to the course of study of the training school, and (4) a carefully standardized routine (described in mimeographed or printed form) for guiding the administration of the practice teaching.

1. THE DIRECTOR AND STAFF OF THE TRAINING SCHOOLS.

Director should be a master of elementary- and normal-school problems.—The director of the training school is the most important officer in a normal school excepting the president. He should possess

many of the same qualifications as were described for the president on page 42. He should be thoroughly informed concerning all phases of elementary school work—that is, he should be able to make a good detailed course of study for all subjects in all grades and should have good critical judgment in the choice of methods. He should have broad training in education and be qualified to teach most of the courses in the department of education. He should have unusual administrative ability, including both force and tact, in order that he might ably assist the president in securing efficient cooperation by all members of the faculty in training prospective teachers for the real concrete detailed tasks which they will undertake when they begin to teach.

Director should have full charge of training school and department of education.—If he is such a competent person as here described, he should be given full charge of the training school and of the department of education (including psychology), subject only to supervision by the president. In view of the importance of his position, if he is thoroughly competent every effort should be made to keep him for many years of service.

Director's salary should be larger than any other instructor's.—Hence his salary may justly be 50 per cent larger than that of any other instructor in the faculty, since the loss of a competent departmental teacher is not one-tenth as serious in the continuous efficient conduct of the training of teachers in the normal school as the loss of a competent director of the training school. In the chapter on salaries we noted one example of the recognition of the superior value and services of such a director of the training department, namely, in the State normal school at De Kalb, Ill., where his salary was \$4,500, compared with \$5,000 for the president, \$3,450 for the professor of pedagogy, and \$2,530 for most heads of departments. The undoubtedly superiority of the organization of the practice situation at De Kalb certainly justifies this large salary. Some of the details of this organization will be discussed in later sections of this chapter.

Competent critics needed; each should supervise only eight practice teachers at one time.—The importance of the immediate assistants of the director of the training department, namely, the critic teachers, was emphasized on page 73 and the number needed in a typical faculty was discussed on page 69. It was estimated that under the best conditions for the children one critic teacher could supervise only 12 graduates a year if these did all of their teaching (100 hours) under one critic (see pages 68 to 73). This would mean 4 practice teachers a term for each critic. If each practice teacher taught only half of her 100 hours under one critic (5 hours a week for 10 weeks), and did the remainder under another critic, each critic

could supervise during 1 week 4 practice teachers for each of the 2 groups of 20 pupils under her charge, making a total of 8 practice teachers per critic teacher. In normal schools, where the importance of practice teaching is recognized, critic teachers are not assigned more than 8 practice teachers at one time and in some places not more than 4. On the other hand, printed reports of some schools show as many as 15 to 20 practice teachers under the direction of 1 critic teacher at one time, and oral reports are occasionally given of critic teachers having charge of 25 to 30 practice teachers at one time. Obviously this is absurd, when one takes into consideration the needs of the children and of the practice teachers and the available energy of a critic teacher. The teaching of the children under these conditions must be far inferior to that in the best public schools and the supervision far inferior to that which a beginning teacher would receive under a good building principal in a good public-school system.

Competent supervision and criticism require unusual skill.—The greatest art in teaching is the skilled supervision of teaching. Hence competent critic teachers must be unusually well-qualified persons. They must be good teachers themselves, must be able to analyze teaching so as to describe it and discuss it with practice teachers, and must be able to direct young teachers under conditions of unusual nervous strain which call for the exercise of great tact and discretion.

Needless to say, the personal factor is such a large element in the matters discussed in this section of the chapter that examples from normal schools must be omitted. In the next section, on course of study, however, matters are so objective that examples can be safely given.

2. COURSE OF STUDY OF THE TRAINING SCHOOL

Good printed course more necessary even than in city schools.—The second factor in determining the efficiency of the practice teaching in a normal school is the existence of a detailed printed course of study of the training school. The importance of such a course of study in improving the efficiency of State and city school systems is generally recognized. In such systems the teachings of a single group of children in the regular subjects is usually done by one teacher for a year. If a detailed printed course of study is important in such cases, it is obviously of much greater importance in a training school where a single group of children may have anywhere from 4 to 50 different teachers in the regular subjects during a year. Apart from the efficiency of the training of the practice teachers, the welfare of the children demands some such definite guide for practice.

Welfare of the children emphasized in New Hampshire training schools.—This phase of the subject is well presented in the report of

State Supt. Morrison, of New Hampshire, for 1911-12 (p. 153). In discussing the model and practice schools at the Plymouth and Keene State Normal Schools he says:

It should be understood that the State has an obligation to the people of Plymouth and Keene in connection with these schools which ought to be observed to the utmost. The normal schools proper are the State's own affair, but the school districts of Plymouth and Keene entrust their children to the agents of the State in order that the State may train teachers for service all over the State.

In the last report of this office the criticism was made that while the schooling which the children received tended to make them mentally alert, it left them far from capable in any of the specific acts of the schoolroom. No course of study was followed and nobody could tell at any given time whether the schools were making good their expectations or not.

In connection with the reorganization which the trustees adopted, it was aimed to correct this defect. The model and practice schools, viewed simply as public schools, are in better condition to-day than at any time in recent years, at least so far as the arts fundamental to all education are concerned. They will average well with the best class of schools of the State, but they can not be said to be the best of their class.

State or city course of study should be followed.—The course of study adopted by the trustees of the New Hampshire normal schools was the State course of study, and it was made the basis of the work not only in the model and practice schools, but also in the normal departmental classes. It is clear that this is a desirable basis for procedure in States where there is an efficient central State department of education and a well-standardized course of study. The next best step in adopting a standard course of study for a training school is to follow the main outlines of the course in operation in the city in which the normal school is located; if the city schools are to be used at all for practice teaching purposes, as is necessary in most places. Such modifications as are necessary can be made by the director of training.

Close coordination with city schools at De Kalb, Ill.—Perhaps the best example of the practice just described is the course of study for the training department of the State normal school at De Kalb, Ill. This was prepared under the direction of C. X. McMurry, director of the training department there until 1915, who is largely responsible for making this one of the best training departments in the country. The relation of the course of study to the city schools, as well as certain other important aspects of the training situation at De Kalb, are brought out in the following quotation from the introductory statement by Prof. McMurry (p. 3 of Course of Study):

The training department of the Northern Illinois State Normal School is provided for in two houses, one a complete and well-equipped building on the campus and the other the Gilligan School, on South First Street, in De Kalb. Each of these schools serves as a regular ward school for the city and has the

same supervision as the other ward schools of the city. About 600 children are provided for in these schools.

As a rule every regular schoolroom is provided with a critic, who closely directs and supervises the work of the student teachers who instruct the children in her room. The principals of buildings, besides the duties of general management, reinforce this careful supervision of class instruction. The lessons are so carefully planned and organized beforehand that student teachers are generally able to find their way quickly into effective teaching.

Two terms of teaching, on half-day time, are the regular requirements for student teachers before graduation. Room charge, or the general management of all classes in a room, is required for one of these terms. Each student in training is required also to attend "critique lessons," that is, illustrative exercises with regular classes given by the room critics or by other experienced teachers. Later these lessons are fully discussed by students and critics.

The heads of departments and other regular teachers in the normal school participate freely in the training-school work, either by advice or direction of students in special departments, such as music, drawing, manual arts, literature, history, nature study, arithmetic, etc., and also by presenting and discussing critique lessons.

The following course of study has been carefully worked out by the superintendent and teachers, aided by the normal-school instructors in their special departments. Many of the more important topics or units of study have been elaborately worked out and the material thus brought into shape has been reduced to printed or typewritten form for the ready use of teachers in all the schools of the city. The same course of study is followed in all the schools of De Kalb, and the training schools thus approximate closely, in material and methods, the usual work of schools.

The De Kalb course of study.—The De Kalb course of study is a pamphlet of 83 pages and consists of very brief concise statements concerning the general character of the work in each subject, followed by detailed descriptions of the topics taken up in each grade. The outlines of some of the more unorganized or newer subjects, such as nature study, are especially full and detailed.

Ready-made outlines assist practice teacher to concentrate on technique of teaching.—The second sentence in the last paragraph quoted above described one unique phase of the work at De Kalb which is especially valuable, namely, the accumulation of outlines, references, illustrative and other materials that the practice teacher can make ready use of in getting her subject matter in shape for teaching. The assumption at the basis of this plan is that the practice teacher should be in a position to concentrate most of her time, energy, and attention on the technique of teaching. The practice-teaching period of a student's education is certainly not the time when she should be mastering the subject that she is to teach. This should be definitely provided for in the departmental courses which should precede the assignment to teaching.

The general plan of organizing the material of practice-teaching units referred to above was described at length by Prof. McMurry in a paper read at the meeting of the normal school section of the

National Education Association in Cincinnati in 1915 and which is printed in the proceedings of the association.

Sample courses of study of training schools.—Among other courses of study for training schools are those from the State normal schools at Salem, Mass., Harrisonburg, Va. (1912), Carbondale, Ill. (1914), Winona, Minn. (1909), Warrensburg, Mo. (1910), Normal, Ill. (1912), and Chico, Cal. (1914).

Winona course of study prepares for real Minnesota conditions.—The course of study from Winona, Minn., was published in 1909 as a revision of earlier editions of 1903 and 1907. The endeavor to relate the course of study to real school conditions in Minnesota is expressed in the following quotation from the preface (p. 4):

In assisting to modernize the course of study for elementary schools we realize that a normal school must not go too far from the commonly accepted course of study, lest student teachers be handicapped by being thrown into situations too strange, when, after graduation, they begin their independent teaching. Consequently this course of study is not so much an expression of what we might like to do as it is a statement of what seems practicable in the schools of Minnesota. That is to say, we try to have in our elementary school for the observation of our student teachers, not a course that is theoretically ideal (if there could be such), but one that is usable in any graded school in the State.

Chico (Cal.) course of study.—In the foreword of the Chico (Cal.) course of study (1914) it is stated that this is the first printed course of study that the training school as such has had, and that its purpose is to serve as a suggestive working manual for the use of supervisors and student teachers and to develop more coordination and correlation between the normal school and the training school.

Detailed courses of study for geography at Chico.—Other significant publications from Chico are two bulletins dealing with the teaching of geography, by C. K. Studley, supervisor of geography. The first has two parts entitled "Map Geography and Journey Geography for Beginners." The second bulletin is entitled "Geography for the Fifth and Sixth Grades." These were published in 1912 and 1913 and include about 150 pages of detailed directions and outlines for teaching geography. In the preface it is stated that these courses of study are all the outgrowth of the work in the elementary department of the Chico State Normal School and are intended to serve as a labor-saving device for teachers.

The last sentence suggests the main issue in this section of the chapter, namely, the development of very definite detailed courses of study as the second important factor in the effective and economical administration of practice teaching.

3. PRACTICAL DIFFERENTIATED DEPARTMENTAL COURSES.

Differentiated departmental courses should prepare directly for practice teaching.—The third factor in developing an effective

practice teaching situation is the organization of practical and differentiated departmental courses which are focused directly on the subject matter and methods of the part of the elementary school in which the prospective teacher expects to teach. The general importance of giving this type of instruction was emphasized in the preceding chapter on course of study. Its relation to the practical teaching is even more obvious and important. There may be some chance that the student who has been given a certain type of course in primary geography will not have an opportunity to teach such work in the school system in which she is employed; but if the normal-school courses and the training-school courses are correlated, as they should be, the *practice work* in geography would certainly be along the same lines as the normal-school courses in geography.

Correlation may be secured by having instructors teach in both schools.—The simplest administrative method of securing this correlation is to require instructors to teach in both places, namely, in the normal school and in the training school. This arrangement is not uncommon in the normal schools of the North Atlantic States. For example, in the catalogue of the Salem (Mass.) State Normal School, we find the following paragraph in a discussion of the training schools (p. 16):

In planning the instruction in these schools the aim is to connect it as closely as possible with the work in the normal school, to the end that the methods of teaching there may exemplify the theory which the normal-school students are taught. In the training school a large part of the instruction is either supervised or actually given by normal-school instructors, and instruction in the normal school is largely based on directed observation by the training department in particular subjects as well as in the theory of education.

President should insist on correlation of work of normal and training schools.—In general, it is the task of the president of the normal school to make sure that the course of study of the training school does correspond roughly to average courses of study of the district that the normal school serves, and to make equally sure that all normal-school courses prepare definitely and thoroughly for the successful teaching of this course of study.

Normal-school instructor must patiently master details of his subject.—The greatest difficulty is found in the fact that so many normal-school instructors feel that they are too big for the detailed work required in such a scheme. As a matter of fact, the positions are too big for the instructors. Definitely and thoroughly to organize the material of any elementary-school subject is a big achievement. But it is a big achievement that requires patient mastery of many details. Hence, a normal-school instructor who is not energetic and persistent is likely to spend his time telling how it should be done, instead of organizing materials so as to help teachers to do it.

STANDARDIZING STATE NORMAL SCHOOLS.

Possibilities in normal-school positions illustrated by achievements of Charles McMurry.—The possibilities of a normal-school instructor achieving big results by careful, persistent detailed work are well illustrated in the many practical publications of the former director of the training school at De Kalb, Ill., namely, Prof. Charles McMurry, who has done more in formulating the material of instruction in several subjects than most departmental normal-school instructors have done in their own special subjects.

If the departmental courses give students a body of organized material and methods which are of practical value, the third factor in the effective organization of practice teaching will be provided for.

4. STANDARDIZED ROUTINE FOR ASSIGNMENTS AND SUPERVISION.

Saves time and confusion in a complicated social situation.—The fourth factor in the effective conduct of practice teaching is the organization of a standardized routine for assignments, preparation of material, supervision, and reports. This routine should be concisely described in a mimeographed or printed handbook for practice teaching. A practice-teaching organization is a very complicated social situation into which new members are being introduced constantly. In order to save confusion and to economize time, if for no other reasons, such a handbook should be provided. It saves much reiteration of directions orally and eliminates many possibilities of misunderstanding. It is of great help not only to new practice teachers, but also to new critic teachers.

Content and value of handbook for practice teaching.—Such a handbook should contain the fundamental regulations governing practice teaching, information concerning the routine of the elementary school, directions for lesson plans, and a concise formulation of the fundamental points in the technique of teaching to which practice teachers and critic teachers should give attention. Such an outline of the points in technique is especially helpful to new critic teachers, who are often at great loss to know how to analyze and discuss with practice teachers the teaching which the latter do.

Best handbook published by McMurry.—Again in this field we find the best production to be one from the De Kalb Normal School, namely, the Handbook of Practice for Teachers, by Charles McMurry, published in 1914. (The Macmillan Co.) In view of the fact that anyone can easily purchase this book, it need not be described. Other handbooks for practice teaching are published by the State normal schools at Platteville, Wis. (1901 and 1907); Peru, Nebr. (1905 and 1909); and Chadron, Nebr. (1913).

Progressive reforms need efficient management to succeed.—In general, normal school instructors are likely to be carried away with

enthusiasm for progressive reforms in education which they have vaguely conceived, and fail to realize that the success of progressive reforms depends upon the efficiency with which reformers apply principles of business management in organizing and standardizing their instruction. A well-organized handbook describing such an organization for practice teaching is the fourth factor in securing effective conduct of this most important phase of normal-school work.

Some descriptions of practice-teaching organizations.—In order to put the reader in touch with a few examples of practice-teaching situations, this chapter will conclude with two quotations from typical normal-school publications or reports. Attention is called to the examples already described in the chapter on practice-teaching facilities, namely, those in the normal schools at Mayville, N. Dak.; Plymouth and Keene, N. H.; De Kalb, Ill.; and Providence, R. I. (p. 49).

Practice teaching at Charleston, Ill.—The following quotations are from the 1913-14 catalogue of the State normal school at Charleston, Ill., which ranks high among American normal schools. It maintains its own training school. The catalogue states that:

At present the school has eight critic teachers, one for grades 1 and 2, one for each of the other six grades, and a special teacher for the work in history (p. 10).

The critic teachers do the greater part of the teaching, then, because it is believed that experience in teaching is valuable only when based on sound educational principles, which are illustrated by a teacher of marked ability directing a well-trained class. Observation of the expert, followed by practice, and this again by observation should be the rule (p. 17).

A considerable part of the teaching is done by the student teachers. All students graduating from the normal school are required in their senior year to take throughout the year a course in practice teaching. For this purpose the school year is divided into four quarters. Each quarter the list of student teachers is divided into as many groups as there are critic teachers, and one group is assigned to each critic for the quarter. By the critic teacher the student is assigned to teach a particular subject in her grade. Each quarter the student is assigned to a different grade, usually two grades in advance of his previous assignment, and to a different subject, until the fourth quarter, when the student's preference for grade and subject is considered.

In the beginning of the first quarter the student makes plans for teaching the lessons in his assigned subject after discussing the subject matter with the critic teacher, but for about two weeks the teaching is done by the critic teacher, the student observing. Gradually the teaching is turned over to the student, the critic teacher observing, and discussing the lessons and lesson plans before and after the student teaches the lesson. Each critic teacher holds one general meeting each week with her group of students, besides special conferences with individuals. She also does as much of the teaching throughout the quarter as seems to her necessary to keep the class up to standard and to furnish the student opportunity to observe expert teaching (pp. 34 and 35).

Practice teaching at Emporia, Kans.—The following quotation from a typewritten report kindly furnished by President Butcher, of the State Normal School at Emporia, Kans., in the fall of 1914, shows how a scheme somewhat similar to that described above works in a large, well-organized normal school with a small training school, containing approximately 180 children, divided for practice-teaching purposes into 15 groups of about 12 pupils each. The report reads, in part, as follows:

Student teachers.—Our group of student teachers this semester consists of the following numbers: Kindergarten, 5; primary, 28; first intermediate, 19; second intermediate, 22; grammar grades, 25; athletic coaching, 3; high school, 15; a total of 115. Considering this work from primary to the grammar course, inclusive, we find that the number of groups of children permits only an average of $3\frac{1}{2}$ hours per week of actual instruction for each student teacher. This student teaching continues for a period of 18 weeks, making thus an average of 63 hours of actual instruction in the training school for the life certificate. This student teaching is supplemented by systematic observation under the direction of the critic teachers in certain types of work other than that taught by the student teacher. Except in the case of teachers of unusual skill the student teacher continues with the same teaching throughout his term of 18 weeks. Exception is made to this rule if for any reason inappropriate assignment of teaching has to be made at the beginning of the term. Of course, in the majority of cases this assignment for the 18 weeks comprises throughout the entire time more than one type of work. For example, teachers may be teaching drawing and arithmetic or physical training and language.

Chapter XI. THE TRAINING OF RURAL TEACHERS.

Two recent bulletins of the Bureau of Education devoted to this topic.—The training of teachers for rural schools constitutes an important part of the work of State normal schools in certain sections of the country where from 50 per cent to 75 per cent of the students in the normal school become rural teachers. In view of this fact it would be quite appropriate to devote a special chapter to a discussion of the courses of study for such teachers were it not for the fact that the Bureau of Education has issued recently two special bulletins which contain a thorough review and discussion of the whole problem of the training of rural teachers. These bulletins are No. 2 for 1913 and No. 49 for 1914. The former is entitled "Training Courses for Rural Teachers," and was prepared by A. C. Monahan, of the Bureau of Education, and R. H. Wright, of the State Normal School at Greenville, N. C. The second bulletin is entitled "Efficiency and Preparation of Rural School Teachers," and was prepared by H. W. Foght, specialist in rural-school practice of the Bureau of Education.

Some State normal schools intensely interested in training rural teachers.—The general interest manifested by the normal schools in the training of rural teachers is described in the following paragraph from page 36 of Mr. Foght's study:

The normal schools should, theoretically at least, be able to prepare teachers for all kinds of schools. Practically, however, they have not always been able to do so. The demand for trained teachers in the city and village schools has in most sections of the country been so great as to absorb all the energies of the schools, leaving little or no time to consider the needs of rural communities. Certain geographical sections of the country, notably the North Atlantic division, have now little genuine agricultural life. Here, naturally enough, the normal schools do not devote much of their time to rural teachers. In such agricultural sections as the North Central and South Central divisions, on the other hand, rural teachers are in the majority. Now that educational ideals are undergoing great changes in these sections of the country, it is reasonable to expect that the normal schools will be prompt to respond to the new needs. These schools have always been ready to adapt themselves to prevailing conditions. In a sense they are so near to public thought all the time as to be "more nearly to-day an actual exponent of public sentiment than any other public institution of equivalent magnitude." The best evidence of this is that the normal schools situated in the agricultural sections of the country are at this time straining every energy to be of greatest assistance in rural-teacher preparation.

Normal-school efforts supplemented by teacher-training courses in high schools and county normal schools.—Obviously, the training of teachers for all of the rural schools of a given district of the State is entirely too large a problem for the normal school which serves this district. This fact has been keenly realized in recent years in a number of States, and arrangements have been made to organize teacher-training courses in local high schools or county normal schools. A complete description of these courses is found in the bulletin by Monahan and Wright, mentioned above, which also contains (on pp. 11 to 35) a description and summary of the courses for rural teachers offered in the State normal schools. In the bulletin by Mr. Foght, the discussion of the work of State normal schools in this line is brought down to a later date. Owing to the ease with which these bulletins may be secured and the fact that they are now quite generally known to persons interested in the training of rural teachers, no further discussion of the organization of such training by State normal schools will be provided in this bulletin.

Chapter XII.

TRAINING OF HIGH-SCHOOL TEACHERS AND CONFER- RING OF DEGREES.

Constitutes a small part of the work of a few State normal schools.—The training of high-school teachers is a problem in which a few normal schools have manifested intense interest. For the most part, however, State normal schools are training relatively few high-school teachers as compared with the number of elementary teachers which they train. Hence a discussion of the present activities of normal schools in training high-school teachers is relatively unimportant.

Rapid increase of high schools may necessitate training of such teachers in normal schools.—The enormous increase in the number of high schools during the last two decades, however, makes the training of teachers for them a very serious problem, and it is quite possible that in some States the careful development of special facilities for training high-school teachers by the normal schools will be a part of the solution. The phrase "careful development of *special facilities*" in the last sentence should be emphasized, because the adequate training of high-school teachers by normal schools demands just as careful and thorough an organization of specialized, differentiated courses as was described for elementary teachers in the preceding chapter.

Would necessitate new advanced academic and professional courses in normal schools.—Some normal-school authorities, in their enthusiasm for additional students and additional courses, and without regard to efficient *specific* training and real per capita costs, maintain that the training of high-school teachers by normal schools would involve no additional expense to the State, since the normal schools already have organized the departments necessary to give such instruction. This naïve assumption overlooks entirely the necessity of organizing specific *advanced* courses in all high-school subjects, as well as *specific professional* courses in the historical, psychological, administrative, and methodological aspects of education. Unless such advanced academic courses are organized, the prospective high-school teachers will not be adequately trained in subject matter, and unless specific courses are organized in the history of secondary edu-

cation, in the psychology of high-school instruction, in methods of teaching in high schools, and in high-school administration the time spent in professional study by the prospective high-school teacher will be largely wasted as far as improving his efficiency as a high-school teacher is concerned.

Academic high-school departments in normal schools tend to expand.—Some of the State normal schools that seem to be the most concerned about becoming colleges for training high-school teachers have themselves barely graduated from the rank of high schools; that is, approximately 50 per cent of their students are still of high-school rank. Moreover, some of the same schools have been least successful in developing the type of training courses for elementary teachers which are generally admitted to be of first importance, namely, carefully differentiated courses with extensive provision for carefully supervised practice teaching. Probably the fact that they have been largely high schools, providing a large amount of purely academic instruction, explains the fact that they want to become colleges doing the same type of work. If they ceased to be high schools (as they must when local high schools develop), and became strictly effective normal schools for training elementary teachers, they would have to abolish their departments of Latin, German, chemistry, physics, and probably certain other departments. Obviously, the teachers in these departments, many of whom have been connected with the school for years (giving courses of high-school grade), do not desire to seek high-school positions elsewhere; they would prefer to become college professors. Needless to say, the necessity of transferring these teachers to other positions in the State should not be permitted to interfere for a moment with the abolishing of their department if this process seemed best to unprejudiced expert central State authorities who were making plans to have the State institutions serve the State most economically and effectively.

Should investigate per capita costs before establishing new advanced academic courses.—Moreover, in any State where the problem of establishing in State normal schools new departments of foreign languages, advanced mathematics, physics, and chemistry was being considered, the central State authorities would do well to look into the probable registration and consequent per capita costs in such departments.

The above argument is not intended to show that normal schools should not undertake the training of high-school teachers. To do so may be part of the best plan to supply the State with such teachers. It is merely intended to point out that it involves just as special an assumption of new, extra, specific tasks by the normal school as is involved in the establishing of new courses in any higher educational institution.

Examples of discussions by State authorities of training high-school teachers.—In keeping with the discussion up to this point, reference will be made to three States in which the problem of training high-school teachers is being given serious consideration, namely, Massachusetts, New Hampshire, and Minnesota.

Massachusetts: Most high-school teachers are college graduates without professional training.—Massachusetts has been a leader in educational development generally, and has certainly taken high rank in the matter of training elementary teachers. It would not be presumptuous to infer that it will do equally well eventually in providing professional training for high-school teachers. The whole problem is discussed at length by Commissioner Snedden in his report for 1912-13 (pp. 36-41). A few quotations will present certain aspects of the situation. Concerning the present staff of high-school teachers of the State he says (p. 37):

In the main, the high schools of the Commonwealth find their teachers among the graduates of the private and endowed colleges, of which there are nearly a score in the State. These graduates vary greatly as to the kind and degree of their professional preparation for the work of teaching. The fact that high schools now rarely employ as teachers persons not possessing an academic degree insures that these teachers have a fair general education. In perhaps a majority of cases they have had considerable college instruction in subjects closely related to those which they are expected to teach in the high schools. A minority of them have had, in addition, college courses in such subjects as the theory and practice of teaching, the history of education, educational psychology, and principles of method given by the departments of education which, within comparatively recent years, have been established in various higher institutions of learning.

It must, however, be said that, in spite of the equipment described above, almost all college graduates employed as teachers in high schools are, in relation to the work they are expected to do, deficient in professional training. Even though they have had courses in the subjects which they intend to teach, and also some theoretical courses in education, they necessarily approach their work as learners, as apprentices, to whom practical means and methods of effectively teaching boys and girls are as yet almost wholly unknown.

Continue to rely on colleges for high-school teachers.—Concerning the desirability of the State organizing special facilities for training secondary teachers, Mr. Snedden says (p. 39):

In Massachusetts, however, it seems inexpedient for the State to enter upon such work until existing institutions shall have had full opportunity to demonstrate their capacity to deal with this problem. They have heretofore trained substantially all such teachers, and have met the demands of the State and local communities in so far as these have been expressed in law or through such formal requirements as certification standards.

Stimulate professional training by certification requirements.—In order to make sure that graduates of existing institutions shall have adequate professional training, Mr. Snedden recommends the development of a scheme of certification of teachers which will

necessitate the organization of adequate professional courses in these institutions.

Supt. Morrison would not train high-school teachers in normal schools.—The general issues discussed earlier in this chapter are clearly expressed by State Supt. Morrison, of New Hampshire, in connection with the problem of training high-school teachers for that State. In his report for 1913-14 he writes as follows (p. 163):

The question will perhaps naturally suggest itself, Why not train high-school teachers in the State normal schools? There are several good reasons why this is not practicable.

In the first place, the normal schools have enough and more than enough to do in the training of teachers for the elementary schools.

Secondly, teachers in the secondary schools need four years of academic as well as professional preparation, and they need the ripening process which comes out of four years of study. The normal-school program calls for two years of strictly professional training. To provide for the academic training of high-school teachers would necessitate the duplication of every existing normal school faculty with an academic faculty.

Finally, even were this done, the normal schools thus enlarged could not hope to offer the general advantages of the larger institutions, and the result would necessarily be an inadequate enrollment of inferior material.

Minnesota: Cooperation of State authorities postponed training of high-school teachers in normal schools.—In Minnesota we find an excellent example of the various educational forces of the State working together on the problem of giving degree courses in the normal schools as well as the matter of training high-school teachers. The State Normal School Board of Minnesota, of which the State superintendent is ex officio president, seems to cooperate with the presidents of the several State normal schools so as to develop efficiently the general normal-school situation. Moreover, the present president of the State university is an unusually broad-minded efficient educational and administrative expert. This situation makes it almost certain that any development in the training of teachers will be for the best interests of the State.

Attitude of the president of the Winona State Normal School.—As regards the training of high-school teachers, President Maxwell, of the State normal school at Winona, states that the Minnesota normal schools have no ambitions in this direction. The following paragraphs, quoted from his report for 1910-12, contain his statement (p. 105):

There is no ambition on the part of the Minnesota normal schools to direct their efforts toward the preparation of high-school teachers. Our field is the elementary school. The elementary school alone, with increased salaries, with demands for better-prepared teachers in all grades, teachers of departmental work, and trained specialists and supervisors sufficiently justifies the enlarged facilities. The 30 or 90 high-school normal-training departments are seeking their teachers from among the number of experienced normal-school

graduates and have already created a demand which normal schools are unable to supply. Indeed, there is no field where the service of scholarship is more needed than in elementary education, rural and graded, none where the problems will continue to grow more as years go by, none whose solution will more fully minister to the welfare of the State. The normal school should regard these problems of elementary education as distinctly and quite exclusively its own and attack them with the enthusiasm and energy inspired by a great mission.

Four-year degree courses for elementary teachers considered.—A part of the history of the movement to develop four-year courses for elementary-school teachers and supervisors by the Minnesota State normal schools, and a description of the cooperative manner in which the problem was attacked are given in the following paragraphs quoted from the report of the president of the State normal school board for 1911-12:¹

The harmonious relations between the normal schools and the State University and the unity which is characteristic of the State's educational institutions is evidenced by the arrangement made between the normal schools and the university, whereby advanced normal graduates receive credit for two years of study upon entering the college of education. Through this arrangement, by two years' additional work in the college of education, the advanced graduate may earn the degree of that college. It is thought that this will have the effect of encouraging a larger number of young men to enter the normal schools, teach for a period, and at the same time afford an opportunity for both men and women who complete the advanced normal course to apply their training toward the earning of a college degree.

At the last session of the legislature a bill was introduced which had the approval of this board aiming to extend the present normal-school course by two years, thus making it possible to give the normal students a more thorough and complete training, and to train principals for graded schools, teachers for the training departments in high schools, and make the normal schools more effective agencies in the leadership and direction of public-school work.

This act failed to pass largely because of the fear that it would make possible, in time, the conversion of the several normal schools into normal colleges. At its meeting in August of the present year the normal board and the presidents, after a full discussion of this subject, decided to renew the request. In this connection a conference was held between the normal board and the presidents, with representatives of the State university, the private colleges, the members of the high-school board, and its inspectors. This conference developed a very friendly spirit and cooperative interest on the part of the educational institutions of the State and resulted in the normal board, upon the recommendation of the normal-school presidents, postponing for the present further activity in the effort to secure a law necessary to make the proposed extended course of study attractive to the students desiring to obtain the degree of bachelor of education.

Normal schools may soon give four-year degree courses for elementary teachers.—These quotations from the Minnesota reports illustrate the fact that (a) the training of high-school teachers and (b) the conferring of degrees by State normal schools may be separate problems. Several normal schools now give three-year courses

¹ Report of Superintendent of Public Instruction for Minnesota, 1912, p. 95.

for high-school graduates who expect to teach in elementary schools, and it is quite conceivable that similar four-year courses will eventually prove necessary or desirable, and that bachelor's degrees should be conferred on the completion of such courses. These degrees should not be given for three-year courses, however.

Three-year degree courses discredit normal schools.—It is very unfortunate for normal schools that some of them have given or are giving bachelor's degrees for the completion of three years of work beyond high school. The fundamental reason for giving such degrees is not easy to ascertain, but the practice is probably related to the fact that it is difficult to get many students to attend most normal schools beyond the third year of collegiate work. They prefer to go to the State university. Even to get them to do three years of collegiate work in the normal school the degree must be offered as a special inducement. This has had the very bad effect of discrediting normal-school work in the estimation of many persons. They assume that since normal schools give a "cheap" degree, therefore all of the work of the normal schools is "cheap," unthorough, and incomplete. As a matter of fact, a normal school giving a bachelor's degree for three years of collegiate work may be superior to many standard colleges in the strength of its faculty and of its individual courses.

Chapter XIII.

THE TRAINING OF TEACHERS OF SPECIAL SUBJECTS.

Disproportionately large discussion of a small function.—The training of special teachers constitutes a small part of the work of State normal schools. Such training, however, excites an amount of discussion and planning that is proportionately much greater than the total amount of normal-school energy devoted to it. To read the requests of normal-school authorities for funds for new buildings and special equipments for the training of special teachers, and to survey the elaborate courses of study found in many of the catalogues, one would infer that these courses were intended to train a great many teachers. When the statistics showing the number of new special teachers employed in public schools, as compared with the number of general ones, are examined, and the number of graduates in the special normal courses compared with the number in the general courses, a better perspective view of the situation is obtained.

Only 8 per cent of new teachers are in special and vocational subjects.—The relative number of new general and special teachers employed during a year in a representative Eastern State may be seen from the following statistics, taken from the report of State School Commissioner Kendall, of New Jersey, for the years ending June 30, 1912, and June 30, 1913 (p. 130):

Total number of new teachers:	In 1912.	In 1913.
In rural schools	1,006	1,055
In city schools	721	763
Total	1,727	1,818

This number was divided as follows:

In high schools	217	800
In elementary schools	1,510	1,518
Total	1,727	1,818

Of this total, teachers of vocational subjects, such as manual training, domestic science, etc., and of special subjects, such as music, drawing, etc., were as follows:

Teachers of vocational subjects:	In 1912.	In 1913.
In rural schools	14	24
In city schools	46	51
Total	60	75
	106	

Teachers of special subjects:	<i>In 1911.</i>	<i>In 1913.</i>
In rural schools.....	23	55
In city schools.....	42	18
 Total.....	 65	 73
Number of vocational and special teachers combined.....	125	148

Thus the number of new vocational and special teachers needed in New Jersey in a year constitutes only about 8 per cent of the total number of new teachers needed.

A new special subject creates temporary demand for teachers.—A further item that must be kept in mind in determining the relative number of special and general teachers needed is the fact that when special courses are being rapidly *introduced*, there is created an increased *temporary* demand for such teachers, which will decrease after most of the new positions have been filled. Such a situation has developed during the last few years in the preparation of teachers for home economics. The large temporary demand for teachers in this subject will probably soon decline to the proportions of the demands for teachers of music, drawing, and manual training.

Very small number of graduates in special courses in normal schools.—The relative number of graduates in the general and the special courses of the normal schools gives us evidence concerning the proportion of normal-school energy consumed in the training of special teachers.

Perhaps the most pessimistic account of the number of students graduating in the special courses is the following paragraph from the 1912 report of the president of the Mayville (N. Dak.) Normal School, which was opened in 1890. After stating that students do not take the advanced course for high-school graduates, the president says (p. 217):

Nor have any students graduated as yet from any of the special two-year courses for high-school graduates. The foremost reasons are (1) the sensible unwillingness of students to specialize at an age when the need of general education is so great, and (2) the relatively small demand for teachers of special subjects, especially in the smaller communities, where nearly all graduates at first go. There are, however, a great many students who take, as parts of general courses which they may be pursuing, from one to three terms' work in the special subjects and who are thus fairly well qualified to give elementary instruction in the subjects studied.

The following statistics from the Winthrop (S. C.) Normal and Industrial College throw light on the relative number of general and special positions secured by its graduates. The board of trustees in their report for 1913 (p. 16) state that from May to December the school had received 301 applications for teachers and had placed graduates as follows:

Positions secured by Winthrop graduates.

General positions:		Special positions:	
In high-school grades	16	In domestic science and related subjects	6
In grammar grades	29	Dietitian in hospital	1
In elementary grades	32	In music and manual training	1
In kindergarten grades	2	Expression in college	1
In rural schools	38		
In mill schools	6		
Supernumerary in Charlton schools	1	Total	9
Total	124		

Further evidence concerning the number of special and general graduates may be obtained from the following statistics of graduation reported for the Mount Pleasant (Mich.) Normal School in the report of the State board of education for 1912 (p. 29):

Graduates from Mount Pleasant (Mich.) Normal School, July 1, 1911, to July 1, 1912.

In the general courses (life certificate, kindergarten-primary, graded school, advanced, and elementary rural-school courses)	228
In courses for special teachers:	
Public-school music course	2
Drawing and manual-arts course	6
Music and drawing course	4
Manual-arts course	3
Special drawing course	1
	16
Total graduates	242

In this school the graduates in the courses for special teachers constituted only 7 per cent of the total number of graduates. Moreover, the number in any special subject was so small that the maintenance of adequate special courses to give this number special training must have been relatively quite expensive. As we shall notice below, the Michigan State Board of Education adopted a plan to go into effect in 1913 that corrected this situation.

A slightly greater proportion of special graduates is shown in the following statistics of graduation from the Northern Illinois Normal School, at De Kalb, based on the quarterly announcement for August, 1914:

Seniors of 1914 in Northern Illinois Normal School.

In courses for general teachers (1, 2, 3, and 5 year courses)	118
In courses for special teachers:	
2-year course in vocal music	8
2-year course for teachers of drawing	5
2-year course for teachers of manual training	4
5-year course for teachers of domestic science	16
	29
Total number of seniors	146

Apart from the prospective teachers of domestic science, however, the situation at De Kalb is practically the same as at Mount Pleasant, Mich.; that is, the seniors specializing in music, drawing, and manual training constitute only 8 per cent of the senior class, and in no one of these subjects is there a sufficient number of seniors to compose a class large enough so that the teaching of it would *not* be relatively expensive.

Finally the statistics from one of the largest normal schools in the country, namely, the California State Normal School, at Los Angeles, should be noted. Only graduates of four-year high schools are admitted to this school, and the annual number of graduates is over 500. Students may graduate in December, March, and June, but to simplify the calculations from the data given in the announcement for 1914-15, the number of candidates for graduation in June, 1914, will be used, as given below:

Candidates for graduation in general course, including kindergartners	325
Candidates for graduation in special courses:	
In the department of art	23
In the department of home economics	40
In the department of manual arts	16
In the department of music	18
	92
Total candidates for graduation in June, 1914	417

In this large institution the candidates for graduation in art, the manual arts, and music constitute 12 per cent of the total candidates for graduation, a slightly larger proportion than was found in the cases of the Michigan and Illinois normal schools. Moreover, the number of graduates specializing in each of these subjects is sufficient to make a large enough class to be taught at the average expense of normal-school instruction.

Three methods of organizing special training courses within a State.—Methods of meeting the definite but restricted needs for trained special teachers vary with different States. The following types of provision may be distinguished:

1. The establishment of separate normal schools for the training of special teachers. The Boston Normal Art School, and the State Manual Training Normal School at Pittsburg, Kans., are examples.
2. The development of adequate facilities for the training of special teachers in certain of the existing general normal schools of a State, with definite *restriction* of the development of similar facilities in other schools of the same State. The arrangements in the States of New York and Michigan are examples.
3. The permitting of any normal school in the State to develop facilities for any special courses that it cares to give. Many of the States present examples of this arrangement.

Concentration of facilities versus duplication.—In general, the economical concentration of adequate facilities for training special teachers is likely to prevail where there is centralized expert control of the normal schools of a State, based on an objective study of the needs of the State. The development of uneconomical, inadequate facilities in a number of schools of the same State is likely to prevail where each State school is free to multiply courses according to its own ambitions. We shall take up the discussion of each of the three types of organization with typical examples.

1. SEPARATE NORMAL SCHOOLS FOR SPECIAL TEACHERS.

Massachusetts Normal Art School earliest example.—The most striking example of the establishment of a separate State normal school for the training of special teachers is the organization of the Massachusetts Normal Art School in Boston. An excellent account of the history, work, and possibilities of this school is given by David Snedden, commissioner of education, in the seventy-seventh annual report of the Massachusetts Board of Education (January, 1914). The opening paragraph reads as follows:

The Massachusetts Normal Art School, unlike the other State normal schools, trains teachers only for special departments, namely, drawing and manual training. It was organized in 1873, primarily because there existed no other agency in the State capable of training special teachers of these subjects; and secondarily to make possible the artistic training of artisans. Since 1873 the school has grown steadily, until at present its attendance is in the neighborhood of 325. It has gradually added in a variety of ways to its original functions, especially in the direction of offering courses in industrial and applied arts for prospective industrial workers (page 48).

Organized to meet definite industrial needs in Massachusetts.—The definite relation of the organization of this school to the economic needs of the State as these were reflected in the introduction of a new subject into the elementary curriculum is shown in the following quotation:

About 1870, various persons in Massachusetts, a number of them identified with the larger commercial enterprises of the State, became convinced that if local industries were to be further developed, more attention must be given to instruction in drawing. In 1869, a petition was presented to the legislature, asking that provision be made by State law for instruction in industrial art. The petition contained this statement:

Every branch of manufacture in which the citizens of Massachusetts are engaged requires, in details of the processes connected with it, some knowledge of drawing and other arts of design on the part of skilled workmen engaged.

The legislature of 1870 made drawing a required study in the public schools of the Commonwealth, and also provided for the opening of evening industrial drawing schools. After a considerable campaign, provision was made for the establishment of the Normal Art School in 1873. From the discussion that took place at this time it was evident that several objects were in view on the part

of those who favored the founding of this school. First, it was essential that special teachers and supervisors of drawing be provided to make possible the teaching of drawing in the schools, as required by State law. Second, it was expected that young persons preparing for work in the trades should, in some cases in this school and in some cases in the evening drawing schools in the large cities, receive that special equipment in drawing and other phases of industrial art which the industries of the Commonwealth seemed to require (page 46).

The Massachusetts Normal Art School was the first institution of its kind in the country. Since 1873 it has graduated a large number of students, many of whom have figured prominently in the artistic and educational activities of the Commonwealth. Some of its distinguished graduates have become heads of similar or larger institutions in other States, as New York, New Jersey, Pennsylvania, Ohio, and Illinois. Some of these schools now greatly surpass the parent institution in Massachusetts in extent and in variety of work carried on (page 47).

The most important function of the Normal Art School, namely, to train special teachers and supervisors of drawing for the public schools of the Commonwealth, is now well defined. During the 40 years of its history the school has graduated a large number of students who have followed teaching as a career. The results of their influence are apparent in all the public schools of Massachusetts. The course of study for prospective teachers is four years in length. It is probable that special courses, occupying an additional year, will soon be added, by means of which experienced teachers of drawing who wish to become supervisors of this subject in public school systems can obtain the required special equipment. The details of the program of instruction for the training of teachers and supervisors of drawing have been worked out and tested on the basis of experience. In selecting a new principal for the school the board has arranged that he should also serve the State as director of art education, so that the Normal Art School would have a direct relation to the supervision of drawing and of manual arts in the schools of the Commonwealth (page 50).

State Manual Training Normal School of Kansas.—A second example of a normal school established for the training of special teachers is the State Manual Training Normal School established at Pittsburg, Kans., in 1903. While this school makes very special provision for the training of teachers of technical subjects, it maintains at the same time the courses for general teachers found in most normal schools. The relative amount of energy consumed in these two lines of activity may be estimated from the following statistics concerning members of the faculty as outlined in the catalogue of the school for June, 1914:

Faculty of the Kansas State Manual Training Normal School.

Teachers of technical subjects related to manual training:

Of manual training	4
Of home economics	—
Of graphic and plastic art	5

Teachers of other special subjects in which certificates are given:

Commerce	2
Agriculture	1

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Teachers of other subjects generally found in normal schools (education, English, history, mathematics, science, physical education, music, languages).....	19
Critic teachers.....	4
President	1
Not stated	1
	6
Total	41

The number of graduates of the Kansas State Manual Training Normal School in June, 1914, is shown in the following table:

Courses.	Number of degrees.	Per cent.	Life diplomas.	Per cent.
Graduates of the technical courses related to manual training and leading to a bachelor's degree:				
Of the industrial arts course.....	5	9.8	23	10.8
Of the home economics course.....	21	41.1	57	26.9
Graduates of other special courses:				
Of the special language course.....			5	2.2
Of the commerce course.....			8	1.5
Of the agriculture course.....			3	1.5
Of the industrial physics course.....	4	8.0	2	.9
Of the drawing supervisor's course.....				
Graduates of the general course:				
Of the general course for the bachelor's degree.....	21	41.1	98	46.2
Of the kindergarten teacher's course.....			1	.4
Of the primary teacher's course.....			13	6.2
Of the grade teacher's course.....			7	3.3
Total number of graduates.....	51	100.0	212	100.0

Provides also a large amount of general training.—These data make it possible to calculate roughly the proportion of normal-school energy that goes into the lines implied in the name "Manual Training Normal School." Using the number of teachers as the basis, we may say that 31 per cent of the teaching energy is devoted to technical subjects related to manual training. Using the number of graduates as the basis, though the issue is somewhat obscured by the different forms of graduates, we may say that only a minority of the graduates are prepared to teach technical subjects related to manual training. In contrast with this number a very appreciable part of the whole body of graduates go into general teaching.

Excellent mechanic arts building and equipment.—The thoroughness of the equipment for technical work in manual training and related lines in the Kansas State Manual Training Normal School is suggested by the accompanying picture of the Mechanic Arts Building, which cost \$62,000 to erect. Its equipment cost \$20,000. The work in wood, iron, clay, and in drawing is done in this building. Classes in domestic science and domestic art are housed in the general academic building, and there is a large separate power plant. These points are worth noting, since so-called manual training buildings are sometimes erected at normal schools, but are used extensively for general classroom purposes, administrative offices, etc. This is due to the

fact that it is easy to get money from a legislature for buildings for the "practical" arts; but there is seldom any special agency to see that the building is used exclusively for the purpose for which it was constructed.

North Dakota State Normal and Industrial School.—In North Dakota, in the Ellendale State Normal and Industrial School, we find another example of a normal school established especially to train manual-training teachers. Under the heading "Purpose and scope of the school," the catalogue for June, 1914, states that the school—

was established by legislative enactment in 1893, in accordance with a section of the State constitution providing for its creation. The revised law of 1907 relating to this school reads as follows (p. 10 of catalogue):

That the institution located at Ellendale, Dickey County, N. Dak., be designated the State Normal and Industrial School, the object of such school being to provide instruction in a comprehensive way in wood and iron work and the various other branches of domestic economy as a coordinate branch of education, together with mathematics, drawing, and the other school studies, and to prepare teachers in the science of education and the art of teaching in the public schools with special reference to manual training.

The accompanying pictures show the Mechanic Arts Building and a class in farm engineering.

Trains as many general teachers as special teachers.—The extent to which the school trains teachers of the special type for which it was especially established, as compared with the extent to which it provides training for general teachers, may be seen from the following statistics of the senior class given in the catalogue for June, 1914:

Seniors in the special courses:

In the normal manual training and the mechanic arts courses.....	8
In the normal home economics and the home economics courses.....	8
 Total special seniors.....	 16
Seniors in the general normal course.....	20
 Total number of seniors in above courses.....	 36

Thus we see that only 44 per cent of these seniors are specializing in the subjects which were emphasized in the official statement of the purpose of the school.

Exclusive manual training normal schools not justified.—In each of the two special manual training normal schools that have been discussed (namely, the one at Pittsburg, Kans., and the one at Ellendale, N. Dak.), it has been seen that a large part of the teaching energy, perhaps the major part, goes into the training of general teachers. This fact might suggest that there is not sufficient demand within a single State for teachers of manual training and related subjects to justify the State in maintaining a separate specialized normal school to train such teachers.

Normal and industrial schools train few industrial teachers.—A few States maintain normal schools which have names similar to the

one at Ellendale, N. Dak., namely, "the State Normal and Industrial School." Some of these are for white students and several are for Negroes. In none of the schools for whites does the training of special industrial teachers play a very large part. Examples of such schools are those at Harrisonburg, Va., Ellendale, N. Dak., Aberdeen, S. Dak., and the "Winthrop Normal and Industrial College," in South Carolina. Statistics showing positions secured by graduates from the latter were given above on page 107. At Harrisonburg, Va., in June, 1913, the graduating class was divided as follows (catalogue, 1914) :

Candidates for the general and the kindergarten diplomas.....	40
Candidates for the household arts diplomas.....	2
Candidates for the industrial arts diplomas.....	5

Similarly the senior class at Aberdeen, S. Dak., for 1913-14 was divided as follows (catalogue, 1914) :

Seniors in the advanced general normal course.....	39
Seniors in the household arts course.....	5
Seniors in the Industrial normal course.....	1

Thus we see that relatively few students of these schools complete the special courses for "industrial" teachers in the "State normal and *industrial* schools" for white students.

State normal and industrial schools for negroes.—Among the State normal and industrial schools for negroes are those at Frankfort, Ky.; Nashville, Tenn.; and Prairie View, Tex. Similar institutions are found in nearly all of the Southern States. Judging from the alumni lists, most of the graduates of these schools go into general teaching in elementary schools for colored children; but the industrial courses play a much larger part in the training of these graduates and of other students who do not graduate than is the case in the corresponding schools for whites. The amount of teaching energy devoted to industrial subjects in such an institution may be inferred from the following classification of members of the faculty at the Prairie View State Normal and Industrial College in Texas (catalogue 1913-14) :

Teachers of special industrial subjects:

Industrial economics.....	1
Agriculture.....	4
Mechanics.....	2
Cooking.....	8
Sewing.....	3
Tailoring.....	1
Shoemaking.....	1
Plumbing.....	1
Carpentry.....	1
Blacksmithing.....	1
Broom and mattress making.....	1
Total teachers of special industrial subjects.....	19
Teachers of other general subjects commonly found in normal schools.....	15

These schools are reproducing on a small scale the excellent work for improving the Negroes that is carried on so extensively at Hampton and Tuskegee.

Stout Institute, highly specialized and successful.—Perhaps the most influential of the State normal schools which are organized especially to train teachers of special subjects is the Stout Institute, at Menominee, Wis. This school was organized in 1903.

For a long time it has ranked, with Pratt Institute, of Brooklyn, N. Y., and Bradley Polytechnic Institute, of Peoria, Ill., among the best schools for providing superior two-year courses for high-school graduates who are preparing to teach manual training and related subjects in public schools. Later Stout Institute was acquired by the State of Wisconsin and is now governed by a board of trustees, including as ex officio members the State superintendent of public instruction of Wisconsin, the secretary of the board of trustees, and the dean of the college of engineering of the University of Wisconsin. The board also includes three employers of labor and three skilled employees.

The highly specialized nature of the training offered at Stout Institute is suggested by the following statistics concerning its faculty (announcement, 1914-15):

Distribution of teachers' time in Stout Institute.

Teachers of woodwork	5½
Teachers of ironwork	2
Teacher of bricklaying	1
Teacher of plumbing and gas fitting	1
Teachers of printing and primary handwork	1½
Teachers of sewing, etc.	6
Teachers of cooking	7
Teachers of home and social economics	2
Teachers of drawing, design, etc.	5½
General teachers (education, science, English, physical education)	7½
Critic teacher	1
 Total	 40

It is evident from the above table that the teaching energy of the faculty of Stout Institute is directed almost exclusively to the giving of specialized courses for training teachers of manual training, drawing, cooking, sewing, and trades. About 80 per cent of the teaching energy goes into these technical subjects. The same impression is gained from the following list of courses of instruction offered:

GENERAL COURSES.

Psychology and pedagogy.	Applied science.
Observation and practice teaching.	Physiology and hygiene.
English.	General chemistry.
Physical training.	Microbiology.

TECHNICAL COURSES.

Manual training department:	Manual training department—Continued.
Organization of manual training.	Advanced bricklaying.
History and literature of manual training.	Elementary plumbing.
Industrial economics.	Advanced plumbing.
Elementary mechanical drawing.	Special shopwork.
Projection drawing.	Primary handwork.
Machine drafting.	Elementary printing.
Elementary architectural drawing.	Advanced printing.
Advanced architectural drawing.	
Manual training design.	Home economics department:
Freehand drawing.	Food study.
Elementary woodwork.	Elementary cookery.
Upper grade woodwork.	Dietetics.
Joinery.	Advanced cookery.
Pattern making.	Food chemistry.
Elementary carpentry.	Chemistry of nutrition.
Advanced carpentry.	Plain sewing.
Millwork.	Model sewing.
Cabinet making.	Dressmaking.
Elementary wood turning.	Art needlework.
Advanced wood turning.	Textiles.
Elementary wood finishing.	Trade dressmaking.
Advanced wood finishing.	Home economics department—Continued.
Saw filing.	Millinery.
Elementary forging.	Drawing and art work.
Advanced forging.	Mechanical drawing.
Elementary machine shopwork.	Drawing and design.
Advanced machine shopwork.	Interior decoration and furnishing.
Millwrighting.	General organization and management.
Foundry practice.	Emergencies and home nursing.
Cement work.	Household management.
Elementary bricklaying.	

Not merely a local Wisconsin institution.—The Stout Institute should not be regarded as merely a local institution of the State in which it is located, as most State normal schools may be regarded. Its students come from many States, and the catalogue for 1914-15 states that its graduates are teaching or doing supervisory work in 27 States and in Canada.

2. SPECIAL COURSES AUTHORIZED IN CERTAIN SCHOOLS.

The second policy in organizing training for special teachers is to provide for the development of adequate facilities in certain of the existing general normal schools of a State, with definite restriction of the development of similar facilities in other schools of the same State. Inasmuch as a normal school that restricts itself to the training of general teachers for elementary schools needs for this purpose

teachers of music, drawing, and handwork, the necessary development of small departments for this purpose is permitted in all of the normal schools of the State.

This policy favored in New Jersey.—A general expression of this type of policy is found in the 1913 report of State Commissioner Kendall, of New Jersey. It reads as follows:

The State should utilize its normal schools for the special training of teachers for various kinds of special activities. The normal school at Montclair, for example, could train teachers for mentally defective children. The State board of education and the principal of the school are maturing plans for this purpose.

The State normal school at Newark might be utilized for the training of teachers for State-aided vocational schools and also for the training of teachers for manual training. The training of the former class of teachers should perhaps be mainly carried on in evening classes for men and women engaged during the day in the industries. Upon such men and women we must depend for teachers in these State-aided vocational schools.

The normal school at Trenton is already training teachers for domestic science and commercial branches, and the school which it is hoped will be established in the southern part of the State should have a course for the adequate training of teachers in agricultural activities.

The above is not so much the statement of a definite program as related to each particular school as it is the declaration of two principles: First, that the State, by means of its normal schools, should train, and train adequately, for the special activities in which the State needs teachers; and, second, that there should not be a duplication of training in two or more schools. Such duplication is not only wasteful, but liable to impair the quality of the instruction. Moreover, so many teachers might be trained in a given field that the demand for such teachers would be exceeded (pp. 184-185).

Authorization of special courses in certain New York schools.—The policy advocated by Commissioner Kendall is being carried out in New York and Michigan. In the bulletin of the New York State department of education of October 15, 1911, the latest issued dealing with normal schools), the following statement is found (p. 25):

SPECIAL NORMAL-TRAINING COURSES.

To provide normal training for teachers of special courses in the public schools special professional courses have been authorized in the State normal schools. It is not the policy of the State to give all special courses in each of the State normal schools, but to assign to each school the special work for which it is best adapted by reason of its location, organization, and equipment. Such special courses have been authorized as follows:

Buffalo.—Mechanical drawing; machine-shop practice; printing, pattern making; Joinery and cabinet work; cookery; sewing and millinery.

Cortland.—Agriculture course.

Fredonia.—Music and drawing.

Geneseo.—Teacher-librarian's course.

Oneonta.—Manual arts.

Plattsburgh.—Commercial course.

Potsdam.—Music and drawing.

The graduates of these courses will receive a diploma which will be a license to teach in the public schools of the State the subject completed.

The detailed content of each of the special courses listed above is outlined by the State department of education.

The amount of teaching energy devoted to the organization of these special courses may be inferred from the data given below.

In the Buffalo normal school, which is designated as the one to develop vocational courses, the faculty contains for this purpose the following instructors:¹

One man, principal of the vocational department.

One man, teacher of drawing and penmanship.

One woman, teacher of drawing.

Three women, teachers of domestic sciences and arts.

At Oswego, where special courses in manual arts are authorized, the faculty includes:²

One man for director of manual arts, criticism, drawing, and shop administration.

One man for woodworking, art metal work, molding.

One man for printing and supervision of printing and commercial lettering.

One-third of a man's time for "form and drawing methods."

One woman for domestic science.

One-third of a woman's time for "sewing, basketry, weaving."

At Plattsburg, which is especially authorized to give commercial courses, two teachers are employed for this purpose, but one of them is also principal of the high school. However, this faculty also includes two teachers of manual training, one of drawing, and one of domestic science and art—almost as large a staff in these lines for which it is not authorized to train special teachers as is found at Buffalo and Oswego.

Michigan assignment of special courses to different schools.—The Michigan plan for assigning to different normal schools the function of training special teachers for certain subjects is described in the report of the State board of education for 1912, as follows (p. 7):

A new plan for the training of teachers for special subjects has been formulated. As at present arranged, each of the normal schools maintains departments in the special subjects. Beginning with the fall of 1913, the State Normal College at Ypsilanti will prepare teachers in the *household arts*; the Central Michigan Normal School, at Mount Pleasant, will prepare teachers of *agriculture*; and the Western State Normal School, at Kalamazoo, will train teachers in the *manual arts and trades*. The normal school so designated for each subject is the only one empowered to issue diplomas or teachers' certificates in the given subject. This will not curtail the usefulness of the departments already organized in other than the given subject, since it will continue to be desirable to provide all the special subjects as electives. The new ruling will insure, by means of this concentration of effort, greater uniformity and thorough technical training for the special teachers.

The faculty of the Ypsilanti normal school, as given in the year-book for 1913-14, contains about 85 teachers, excluding the faculty of

¹ Circular of information, 1914-15.

² Catalogue for 1914-15.

the training school. This includes about 20 professors, 5 associate professors, 10 assistant professors, 20 instructors, and 30 assistants. In the department of household arts, which is assigned to Ypsilanti as a special department, there are five teachers. One of these is listed as head of the department (rank not stated), 2 are instructors, and 2 assistants. This number of teachers is sufficient to provide strong courses in home economics and household arts in an institution where there are strong related departments in the natural sciences and the fine arts, as is the case at Ypsilanti. As regards material equipment, the yearbook states that in the near future a household-arts building will be erected. When this occurs, the number of instructors in this special department will probably be increased, since so large an institution would probably develop an enormous registration in the household-arts department.

3. DUPLICATION OF SPECIAL COURSES IN SEVERAL SCHOOLS.

The third type of policy in the organization of training for special teachers within a given State is to permit any normal school in the State to develop facilities for any special courses that it cares to give. This is the policy followed in most States, and, under it, most normal schools are likely to develop special two-year courses for teachers of music, drawing and manual training, and home economics.

Sometimes done to use time of special teachers.—In the large schools where two or more college teachers are employed in any one of these subjects, a fairly adequate course can be given. In the smaller schools where only one college teacher of each subject is employed, the special two-year course which he can offer is not likely to be strong. Unless such a special teacher is also employed in the practice school or the normal high-school, however, he is likely to have to offer a course for special teachers of his subject *in order to employ his time*; for in a small normal school the amount of instruction required in music, drawing, manual training, and home economics, for students in the general courses, is very slight. The general students seldom take more than two periods a week of music through two years, or two periods of drawing through one year, or two periods of manual training or home economics through part of one year. Yet so extensive is the discussion of these subjects that every school feels it *must* have a special teacher of each. This sometimes results in a rather anomalous situation in a small normal school, where there will be four special teachers for these special subjects, and only as many more teachers for the general subjects of education, English, history, sciences, and mathematics, which necessarily consume much more teaching energy in the preparation of general elementary teachers. For example, according to the 1914 catalogue of one of the New Eng-

land normal schools, there are on the faculty four teachers of the general subjects (pedagogy, science, English, and sociology) and four teachers of the special subjects, one teacher each for art, domestic arts, music, and manual training. No doubt these teachers also teach the children in the practice school; yet they find time to offer "a three years' curriculum to prepare for teaching and supervising music, drawing, and domestic arts."

Specifically authorized in some States: Minnesota.—In some States each normal school is independent of any central control in organizing such special courses as it pleases to give. In other States, however, the State normal school board may specifically authorize all of the normal schools to offer all of the specialized courses. For example, in the case of Minnesota, we find the following action recorded in report of the State normal school board for 1911-12:

The normal schools have responded to the demand, which has become very evident in the State, for teachers of specialized training. Upon the recommendations of the presidents (of the normal schools), the normal-school board has authorized the establishment of special courses for the training of supervisors of music and drawing, of special primary teachers, and teachers in home economics and manual training.

The normal schools of Minnesota are large enough, on the average, so that slightly more than the time of one instructor is employed in the four standard specialized subjects, namely, music, drawing, manual training, and household arts or home economics. Consequently, instead of only four teachers for these subjects combined, from five to seven are employed.

Examples of duplication in large normal schools of Missouri.—Among the normal schools maintaining larger special departments under the third type of policy, which we are discussing are those of Missouri. At Warrensburg the catalogue distinguishes the academic and the special or technical departments as follows:

ACADEMIC DEPARTMENT.

Agriculture, physiography, and geog. phys.	English language and literature.
Biology.	French and German.
Chemistry, physiology, and hy- giene.	History.
Economics.	Latin and Greek.
Education.	Mathematics.
	Physics.
	Training school.

DEPARTMENT OF TECHNICAL SUBJECTS.

Commerce.	Manual training.
Drawing.	Music.
Household arts.	Physical education.

Seventeenth Bienn. Rept. of Sup't. of Pub. Instn. of Minnesota, p. 95.

The number of teachers at Warrensburg, excluding those in the practice school, is about 40. In this number are included 2 teachers of drawing, 2 of manual training, 2 of home economics, and 4 of music. (Bulletin for 1914-15.)

The number of teachers at the Kirksville (Mo.) Normal School is also about 40 (excluding teachers in the practice school and "teaching scholars"). In this number are included 1 full-time teacher and 1 part-time teacher of manual arts, 2 of drawing, etc., 2 of home economics, and 8 of music. (Bulletin, 1914.)

Somewhat similar data are found in the faculty of the normal school at Cape Girardeau, Mo. Thus each of three of the large normal schools of one State devotes approximately one-fourth of its teaching energy to these four special subjects. In the Warrensburg and Cape Girardeau catalogues there are outlined full three-year courses for high-school graduates who plan to prepare to teach each of these special subjects. The number of graduates of each of these courses is not indicated, however.

Second policy better than first or third.—Of the three types of policies in organizing courses for the training of special teachers in the normal schools of a State, it should be said that the first policy, namely, to establish a separate normal school for this purpose is probably not necessary in any State. This is shown by the fact that some schools that have been established in this way have become largely schools for training general teachers. The fact that all of the new special and vocational teachers in a State may constitute less than 10 per cent of the total number of new teachers shows that most States can ill afford to establish a special normal school for some part or all of this 10 per cent.

The third type of policy, namely, permitting any normal school in the State to establish any special courses, is not bad where the normal schools concerned are so large that two or more teachers are employed in the special subject in which special training is to be given. In the smaller schools, however, it is likely to be inadequate, owing to the lack of sufficient equipment and teaching staff. In any case, it is likely to prove expensive, through the unnecessary duplication of equipment and teaching staff in the several normal schools of the State. One of the most favorite bases for requests by normal school presidents to the legislature for additional funds is the plea for special buildings and equipment for these special courses. Yet the statistics show that relatively few graduates are produced even when the faculties are provided.

Obviously, in most States, the best policy is the second one, namely, to develop adequate facilities for the training of teachers of a given special subject in one of the regular normal schools of the State. This avoids the waste entailed in establishing a special school, which

prevails under the first policy, and the waste from duplication under the third policy. At the same time it may assure as thorough training as does the first policy, and avoid the inadequate training which may result from the third policy.

SAMPLE COURSES OF STUDY FOR SPECIAL TEACHERS.

The principal subjects in which normal schools provide training courses for special teachers are music, drawing, manual training, home economics and household arts, and commercial subjects. Practically all normal schools have courses for general teachers in the first four subjects mentioned, and most of them announce training courses for special teachers in each subject. The organization of training courses for special teachers of commercial subjects is not so common, but the courses are found in a number of normal schools.

Difficult to analyze and classify courses.—To attempt to classify and describe the special courses provided in all these subjects would be a difficult task and would not be worth while from the standpoint of this bulletin. Certain general characteristics may be noted, however, and a few sample courses in manual training, home economics, and commercial subjects presented.

Two opposite types of curricula. 1. Much general work included.—In general, the courses organized for the training of special teachers fall into two main types. The first type of course is constructed by slightly modifying the regular course for general teachers. This modification usually consists in permitting a prospective special teacher to elect about one-fourth of his work in the special subject in which he is interested. The remainder of his course will consist of the usual courses in education, psychology, geography, mathematics, physical training, etc., taken by the students in the general course. This type of course is common in the normal schools where there is only one teacher for the special subject in question. Needless to say, the graduates of such special courses have had very meager training for their specialties.

A modification of the above type of course is to provide an additional year of more or less special training for students who have completed one of the regular courses for general teachers. This additional year, however, often contains further work in general subjects, such as the history of education or sociology, and may not provide any more thorough special training than the shorter course described above.

2. Two or three years of highly specialised work.—The opposite type of course consists of two or three years of work devoted almost entirely to the special subject that the student is preparing to teach.

with such courses in other subjects as are definitely and specifically helpful in the special subject. A few hours in education and practice teaching are usually included in such a program. When one becomes familiar with the large amount of special and related subject matter that it is necessary to master in order to be well prepared to teach any one of the special subjects under consideration, there remains no doubt that these more highly specialized courses are necessary in order to give adequate training.

Sample manual training course, Oxford, Ohio.—As a sample manual training course, there is outlined below the work required in the two-year course for high-school graduates at the State Normal School at Oxford, Ohio. There are about 5 teachers to give the special instruction included in this course, and there were 6 graduates from it in 1915. It is of the last general type described above, namely, almost entirely special in content.

Course for special teachers of manual arts.

FIRST YEAR.		SECOND YEAR.	
	Hours.		Hours.
Object drawing and sketching	2	Advanced mechanical drawing	4
Elementary mechanical drawing	4	Constructive design	2
Elementary design	2	Modern educational tendencies	3
Psychology, principles of teaching	6	Organization and special method of the manual arts	4
Rhetoric and composition	6	Cabinetmaking	6
Handwork in wood	6	Trigonometry; analytics; shop mathematics	6
Sanitation and health:		School organization and management	8
a. Hygiene; first aid	1	Teaching manual arts	4
b. Physical education	2		
Elective	8		

Credits required for first year..... 32 Credits required second year..... 32

All students are strongly urged to complete the full four-year course (see p. 117) and receive the degree of bachelor of science in education, thereby placing themselves in line for the better teaching positions. However, those who must teach before completing the four-year course may take the course above and receive a State diploma and State teaching certificate. All electives in the course must be manual arts subjects.

Sample home economics courses, Valley City, N. Dak.—The course in home economics (domestic science) in the State Normal School at Valley City, N. Dak., is a good example of a two-year course for high-school graduates which contains a large amount of general work. There were either three or four teachers in the special department (three in the faculty list, but four in the departmental description) and 28 graduates from the course in June, 1914.¹ The course of study is outlined below.

¹Catalogue, 1914, p. 21.

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Domestic science course at Valley, City, N. Dak.

FIRST YEAR.

Fall.	Winter.	Spring.
Psychology. General methods and penmanship methods (each 6 weeks). Physiology. Chemistry. Domestic science.	Psychology. Reading methods and singing methods (each 6 weeks). Arithmetic. Chemistry. Domestic science.	Psychology. History. Household chemistry. Domestic science. Home training and textiles (each 6 weeks).

SECOND YEAR.

Fall.	Winter.	Spring.
History of education. Grammar. Teaching. Economic biology. Domestic science.	Philosophy of education. Geography. Teaching. Economic biology. Domestic science.	School management. Teaching. Economic biology. Domestic science. Millinery and art needlework.

Los Angeles, Cal.—A much more specialized course in home economics is the one in the State normal school at Los Angeles, Cal. The department of home economics in this institution had 2 teachers in 1914-15, with 2 student assistants, and a third teacher for part of the year. The number of candidates for graduation in the home economics course in June, 1914, numbered 40. (Announcement, 1914-15.) The department offered a two-year course for high-school graduates and a one-year course for normal-school graduates. Only the two-year course is outlined below:

Home economics course at Los Angeles, Cal.

First year.	Units.	Second year.	Units.
First term.		First term.	
Psychology.....	5	Education.....	5
Cookery.....	3	Teaching and observation.....	5
Sewing.....	3	Cookery.....	5
Art.....	3	Millinery.....	5
Textiles.....	4	Home economics education.....	4
Total.....	18	Total.....	18
Second term.		Second term.	
Cookery.....	3	Teaching and observation.....	5
Sewing.....	3	Cookery.....	5
Art.....	3	Dreammaking.....	5
Food production and manufacture.....	2	Supplemental.....	5
Home management.....	2	Total.....	18
Supplemental.....	5		
Total.....	18		
Third term.		Third term.	
Psychology.....	5	Teaching and observation.....	5
Cookery.....	3	Diabetes.....	5
Sewing.....	3	House furnishing and decoration.....	5
Food chemistry.....	3	History of home economics.....	5
Costume design.....	3	Bacteriology.....	5
Numismatics.....	3	Supplemental.....	5
Total.....	18	Total.....	18

Sample course for commercial teachers: Salem, Mass.—As a final sample of courses for the training of special teachers, we shall present a course for prospective teachers of commercial subjects, which is offered in the State normal school at Salem, Mass. In this school the time of about four teachers is devoted to instruction in commercial subjects, and there were 15 graduates from the department in June, 1913. The fundamental course covers three years of work for high-school graduates. In a note in the catalogue for 1913-14 it is stated that the State board of education had under consideration the lengthening of the course to four years, which would include one year of business experience under the supervision of the school. The three-year course is largely specialized, but includes a certain amount of work in closely related subjects. It is outlined below.¹

Course for commercial teachers at Salem, Mass.

First year.	Hours per week.	Second year.	Hours per week.	Third year.	Hours per week.
English.....	2	English.....	2	Literature.....	4
Shorthand.....	4	Commercial correspondence.....	1	Shorthand.....	3
Typewriting.....	5	Shorthand.....	3	Typewriting.....	3
General history.....	2	Typewriting.....	3	Commercial law.....	2
		American history and civics.....	3	History of commerce, economics, half year each.....	3
Physiography.....	2	Commercial geography.....	2	Industrial geography.....	2
Industrial physics and chemistry.....	2	Commercial arithmetic.....	2		
Bookkeeping.....	3	Bookkeeping.....	3		
Penmanship.....	1	Penmanship.....	1	Bookkeeping.....	3
Physiology.....	1	Psychology.....	3	Penmanship.....	1
Music.....	1	Music.....	1	Pedagogy.....	2
				Music.....	1
Total.....	23	Total.....	24	Total.....	24

Observation and practice teaching, 9 weeks.

A carefully elaborated announcement of normal-school courses for the training of commercial teachers is the third annual commercial catalogue of the State normal school at Whitewater, Wis. In 1913 the board of regents established a special department at this school for training commercial teachers, and very thoroughly organized courses are offered.

Courses for teachers of trades.—Special courses for teachers of trades and related vocational courses are not discussed here, because the normal schools have not generally undertaken the task of training such teachers and are probably not fitted to do so in most cases. According to Commissioner Snedden, of Massachusetts, the best plan for training such teachers is to organize evening courses in the State-aided industrial schools in certain of the larger cities. These courses would give the necessary general and professional training to intelligent skilled workmen who are engaged during the day in the trade. After completing the evening course, they would be prepared for

¹ Catalogue, 1913-14.

teaching. Graduation from an industrial school and experience in the trade should precede the professional training. For further discussion, see the annual report of the Massachusetts Board of Education for 1912-13, pages 62-68.

Of the existing State normal schools, Stout Institute in Wisconsin is the one that is most adequately equipped to train teachers of trades. Tuskegee Institute, in Alabama, receives a small amount of State aid and to that extent may be considered a State school. Needless to state, it provides the most thorough and efficient courses for training teachers of trades, many of its graduates being engaged in similar smaller schools for negroes. Likewise, Hampton Institute in Virginia provides excellent training for teachers of trades. If day schools for this purpose are to be established for white teachers in the North, they might profit by a study of the methods pursued at Tuskegee and Hampton.

Courses for special teachers of agriculture.—A few normal schools maintain well-organized special courses for teachers of agriculture. A good example is the three-year course for high-school graduates in the State Normal School at Cape Girardeau, Mo. The department of agriculture in this school employs three men as teachers. Hence, it is well-staffed to give the special courses to prepare teachers of this subject in high schools. The three-year course is of the highly specialized type. It is outlined below.

Course for special teachers of agriculture at Cape Girardeau, Mo.

FIRST YEAR.

Fall term.	Hours.	Winter term.	Hours.	Spring term.	Hours.
Chemistry.....	4	Chemistry.....	4	Agricultural chemistry.....	4
Live stock.....	4	Live stock.....	3	Dairying.....	4
Manual training.....	1½	Manual training.....	1½	Manual training.....	1½
Education.....	3	Education.....	3	Education.....	4
Forage crops.....	3	Field crops.....	4	Cotton.....	4
	15½		15½		17½

SECOND YEAR.

Plant physiology or zoology.....	4	Morphology or zoology.....	4	Plant ecology or sociology.....	4
Physical practice.....	1½	Physical practice.....	1½	Physical practice.....	1½
Sodas.....	4	Horticulture.....	3	Farm management.....	3
Education.....	3	Education.....	3	Education.....	3
Do.....	8	Do.....	3	Do.....	3
Forge.....	1½	Forge.....	1½	Forge.....	1½
	16		16		16

THIRD YEAR.

Agricultural physics.....	4	Agricultural physics.....	4	Agricultural physics.....	4
Rural economics.....	3	Feeding.....	3	Poultry.....	3
Economic entomology.....	4	Principles of breeding.....	4	Bacteriology.....	4
Education.....	4	Education.....	4	Farm accounts.....	4
Do.....	8	Do.....	3	Education, elective.....	3
Forge.....	1½		17	Education.....	3
					17

Chapter XIV.

PROGRAM FOR DEVELOPMENT OF NORMAL-SCHOOL STANDARDS.

Reiteration of the demand for standardization.—All the studies reported in the preceding chapters of this monograph make it clear that there is great need of a movement to standardize normal schools. Again it may be said, as in an earlier paragraph, that this demand for standardization is not to be confused with the demand that all normal schools be made alike. The organizations and entrance requirements of various normal schools may vary in accordance with the local demands and spheres of operation of the different institutions. In each case, however, the characteristics of the school should be defined. The student body will then find that other higher institutions can deal equitably with their claims; the legislature will know more definitely the purposes for which it is appropriating funds; superintendents throughout the State will know more fully what kind of products they are to look for; and the community will understand and respect the normal school more fully than ever in the past.

Standardization should be from within.—The question arises at once, Who is to do the work? Outside agencies are not likely to succeed, because wherever these agencies criticize an institution they stir up antagonisms rather than bring about reforms. Furthermore, if outside agencies compel reform through the arousal of public sentiment or through legislative action, there is likely to be a half-hearted or even unfriendly attitude on the part of normal-school faculties. Even a State superintendent or commissioner finds himself unable to change normal schools as a result of his investigations without a long struggle, during which he has to bring the officers of the normal schools to take his point of view.

This is equivalent to the demand that in all respects normal schools become scientific.—There can be no question whatever that normal schools ought to standardize themselves. These institutions would gain many indirect advantages, as well as direct advantages, from an effort to understand and define themselves. The normal school ought to be a center of vigorous study of all kinds of educational

institutions. Teachers who are going out into rural schools ought to learn during their normal courses to understand rural schools. Teachers who are going into urban schools should have these institutions clearly defined during their period of training. Teachers in service ought to be given courses in normal schools which will improve them in professional equipment. This task of defining other institutions will be most intelligently undertaken by that normal faculty which has made a serious effort to understand and define their own work. When an officer of any educational institution begins to study his own functions, he develops an attitude and a method which carry him out to deal with all the problems of all educational institutions. There is nothing that will cultivate in normal-school teachers and presidents the attitude of scientific study of education more quickly or more completely than the study of the functions of their own institution.

The indirect advantages above referred to would furnish sufficient justification for the urgent plea that normal schools study their own functions. The direct advantages need hardly be enumerated again in the concluding chapter of this study. It remains only to outline the methods which may be followed.

Reports on organization and operations needed.—It is suggested that normal schools add to their publications a president's report. This report could be made a part of the annual catalogue, or it could be published separately, after the manner of most university presidents' reports. In some cases it might be desirable for the presidents of the normal schools in a given State to unite and issue a single joint report.

Characteristics of the student body.—This president's report should give full information about the student body. A table should be given reporting explicitly the amount of training of each student at the time of his or her admission to the normal school. There should be explanatory statements indicating how these facts are ascertained at the time of admission, how far irregularities are tolerated, and how these irregularities are administered. In short, the whole problem of admissions should be exposed to the light of unrelenting publicity. There can be very little doubt that one of the most serious difficulties in transferring students from normal schools to colleges or universities arises directly out of the irregularity of admissions. It is not here argued that admission requirements should be of one sort or the other, but it is argued that they should be clearly defined.

Geographical studies should emphasize academic matters.—Further information about the student body which is valuable, although not so valuable as that relating to admissions, is the information regarding geographical distribution. This is important as showing the

range of influence of the institution. This study of geographical distribution can be made academically the more productive if a study is made of the high schools and other institutions with which the normal school comes into contact. Thus, if a normal school draws its students from a region liberally supplied with standard high schools, its attitude toward secondary courses within the walls of the normal school should be very different from that of an institution drawing its students from a region in which there are no standard high schools. The whole problem of standardizing high schools is thus seen to be one with which the normal schools should concern themselves. Up to this time normal schools have been satisfied to leave the high schools to the supervision of colleges. In no less degree is it important that normal schools should study neighboring colleges. The time is rapidly passing when communities will support rival institutions of higher education. Economy dictates that there be clearness of definition in dealing with colleges. It is not surprising that up to this time normal schools have been out of contact with colleges, for the normal schools have been different in organization and support from the colleges. In recent years, however, the differentiating characteristics have been more and more eclipsed by those common purposes and modes of operation which have grown up in all higher institutions. Normal schools in some quarters are demanding admission to organizations to which they have not up to this time been admitted. The normal schools undoubtedly have a fair case, but they can be fully recognized only when they define themselves. Like all late comers, they will have to make their case; no one is going to do the work for them. It is urgently recommended, accordingly, that a geographical study be made, emphasizing the academic relations which the geographical surroundings impose on the school.

Other tables showing the ages, sex, and rate of progress through the normal-school classes would be most illuminating.

Studies of faculty should be detailed and explicit.—A second general line of information which should be supplied relates to the faculty. The faculty should be described in detail with reference to its training, experience, present activities, and literary or scientific productivity. In earlier chapters comment has been made on the relatively small number of faculty members with academic degrees, when normal schools are contrasted with universities and colleges. There are doubtless other compensating facts in many cases, but at present these facts are inaccessible. Furthermore, there is a widespread skepticism on the part of colleges and universities with regard to the qualifications of normal faculties. Normal schools can not afford to ignore this skepticism or remain silent with regard to the requirements that are set up when new members of the faculties are

being chosen. The facts should be brought out. Either each member of the faculty should be fully described or tables should be presented showing training and experience.

What does the faculty do besides teaching?—Productivity is one of the surest signs of intellectual vitality and strength. This productivity takes the form at times of scientific or literary output. At other times productivity means work on committees or lectures in extension courses or at teachers' meetings. There is on the part of many practical school people a fine scorn for research, it being held by them to be a mark of undue absorption in abstractions when a man carries on investigations. The answer to those who criticize research is that research is at present one of the best-defined evidences of intellectual vigor. Doubtless there is great intellectual vigor exhibited in other ways. It is legitimate to ask that the normal school bring out this fact in defining the activities of its faculty. If the best members of each normal school faculty could be defined in such a way that the educational profession at large could know what activities are legitimate and demanded, there would perhaps arise a new professional class superior to the research professor now so eagerly sought in higher institutions of learning. In the meantime one notes that the undefined class of normal-school teachers does not produce so much useful general intellectual material as ought to be expected. One would naturally expect textbooks and courses of study and new methods and carefully evaluated descriptions of school work issuing from normal schools. The fact is that very little material of this type comes from such sources. Furthermore, what does come is not clearly exhibited, so as to become a professional ideal. It is recommended that lists of outside activities be published.

Studies of faculty activities will lead to better conditions for productive work.—It was pointed out in an earlier chapter that the teaching programs of members of normal-school faculties are longer than the programs of faculties in other higher institutions. The policy of each normal school in this matter of hours of work should be clearly set forth. The community has of late been much interested in criticisms passed upon higher institutions because of the supposed delinquency of university professors. There can be no doubt that the normal school ought as a public institution to concern itself in this problem of defining the duties of an academic servant of the community. The failure of the public and of higher institutions to define clearly the legitimate demands in this matter affects the intellectual life of all grades of schools. No one knows how to frame demands which may be properly imposed on faculty members. Often a normal-school president does not know how much professional study goes with any of the positions to which he appoints. Members of

the faculty have no adequate professional standards. In public schools attention is being given to such matters in rapidly increasing degree. Normal schools should assume leadership.

The course of study more in need of standardization than any other aspect of normal-school organization.—The third general problem which should be taken up in the report is the problem of the course of study. For purposes of this discussion a sharp distinction may be made between the courses in education and the other courses which deal with the subject matter to be taught in schools. The education courses in American normal schools have traditionally consisted of the history of education and a course or series of courses in psychology, with some courses possibly in general methods. It is the general consensus of opinion in most school systems that the normal-school work given in the history of education is very barren of results. Hardly less common are the criticisms which are made of the kinds of psychology usually taught. It would seem in the presence of these criticisms that it is altogether desirable that the various normal schools describe to each other clearly what they are undertaking in their courses in education. The name of the textbook used is very frequently helpful in determining what has been accomplished. The American Psychological Association, through one of its committees, made an elaborate report some years ago showing what is undertaken in psychology in normal schools. There can be no doubt at all that the normal schools are very vitally interested in a definition of the subject matter of these courses, and yet it is quite impossible to gather from any of the reports that are at hand any clear statement of what is undertaken.

New courses in education needed.—It is probably true that the courses in education should be of a somewhat different type, and there is a large demand at the present moment for the drafting by experienced normal-school teachers of outlines which may be used in training immature students. Most of these students fresh from the high school do not realize at all the problems that are to confront the teacher. They should probably be given an introductory course in which educational problems and methods are defined. There should be a very great emphasis upon the empirical material which is now at hand in superintendents' reports and in the special studies which have been made of such matters as retardation and elimination. Problems of industrial education, the problems of the modification of the course of study, are all vital problems which the teacher ought to understand. And yet, the ordinary normal school gives very little attention to these great reform movements which are going forward in the schools, and the professional courses deal with the remoter periods of the history of education and with the reformers that are so far back in time and in spirit that the normal

school student has no contact through these remote studies with the community and the classroom problems with which he or she will come in contact immediately on graduation. Whether psychology shall be taught as a separate subject or in the modified form as an examination of the mental processes which appear in school children during school processes can, of course, be discussed as an academic issue, or it can be discussed as a very vital problem of the course of study. A comparative statement of what is undertaken now in various normal schools would be very helpful in bringing about a rapid modification and an enlargement of this type of work.

Subject-matter courses should be organized so as to stimulate progressive thinking in mature students.—Even more chaotic conditions are found in the subject-matter courses in arithmetic and grammar and geography. There are some normal schools in which the subject is frankly reviewed, on the theory that the student has forgotten since his elementary course everything which he knew about the subject matter itself. In other normal schools there is relatively very little review, or such reviewing as is undertaken is recommended to the student as the subject of private study. In these normal schools it is the method which is for the most part discussed. Sometimes this method consists in the exploitation of some particular scheme of presentation which is the hobby of the normal-school teachers. In other cases the discussion of method is on a somewhat broader basis, and a comparative study is made of the different methods of presenting the different distributions of time in different school systems, etc. Here again there ought to be a full discussion of principles. Each year a report from the normal school ought to be made of the fundamental principles which are recognized in organizing these courses in subject matter. It is perfectly evident that a course in arithmetic is not a suitable subject on which to exercise the growing intelligence of a student who has graduated from high school. He ought presumably to have a very large part of the equipment that is necessary for the course in arithmetic. On the other hand, there can be no doubt at all that a study of arithmetic can be formulated in such a way as to give the student some knowledge of the principles of number as well as an experience that will be of very great value to him in his teaching and the organization of this material. We have no adequate series of textbooks dealing with this problem. The ingenuity of normal-school teachers should be turned in the direction of formulating this material, and one of the most stimulating methods of turning attention in this direction would be a discussion by able leaders in normal-school education of the problems and methods of this type of course.

The problem of "culture" courses or "general" courses not solved.—Finally, in dealing with the normal-school course of study

the question always arises, How much academic matter should be introduced? It has been indicated in an earlier report that some normal schools give a good deal of academic matter. Courses in Latin are not uncommon in these normal schools, even when it is not expected that the students who take the courses will ever teach the subject. The relation of this academic material to the problem of the training of secondary-school teachers is also an important question which certainly in many normal schools needs very much more complete discussion than it has at the present time. There should be a report of the distinctions between academic courses and professional courses. When the North Central Association of Colleges and Secondary Schools asked the normal schools reporting to it to define clearly their courses, distinguishing between those that were academic in character and those that were professional, a very unsatisfactory set of replies was received. Evidently the distinction had never been drawn in the minds of some of the normal-school presidents who made the reports to the association. This distinction should be made the subject of discussion and definition, so that ultimately it will be perfectly clear what is needed for the professional and what is needed for the academic training of students.

Practice teaching as a central factor in the course of study.—Great emphasis was laid in an earlier chapter on the problem of practice teaching and its organization in the practice school. What the laboratory is to the course in science, what the shop is to the course in engineering, the practice school is to the normal school. And yet it is very difficult indeed from the reports of many normal schools to extract satisfactory information with regard to the actual conduct of practice work. In an article entitled *Practice Teaching in Model Schools*, published by Mr. E. E. Lewis, of the State Normal School of Charleston, Ill., in the *Elementary School Teacher* of May, 1913 (pp. 434-444), it is brought out clearly that there is the widest divergence among the model schools connected with normal schools throughout the country. For example, Mr. Lewis makes one summary, as follows, on page 438 of the *Elementary School Teacher*:

To summarize, 53 per cent of the State normal schools replying require the equivalent of three terms, or one full year, of practice teaching; 34 per cent, the equivalent of two terms; 8 per cent, the equivalent of one term; and 5 per cent, less than one term. There are possibly two institutions which require more than one year of practice teaching. The median institution requires three terms or one year.

Mr. Lewis also goes further in his article to show that the distribution of this practice teaching with reference to the methods courses is very different in different institutions: "The two prevailing tendencies are, first, to have practice teaching taken simultaneously with methods, and, second, to have practice teaching follow immediately

the course in methods. The second plan is more common." Further details of the article need not be repeated here. Enough to say the practices of different normal schools differ widely, as indicated also in the earlier chapters of this report. Why should there not be in accessible form for every normal school a definition of its laboratory and of the way in which it requires students to attend the exercises of this laboratory? Furthermore, a definition of the policy of the institution and its relation to schools would be of very great value. It is noted in an earlier chapter that some schools do give a definition of this sort, but it is very desirable that all the normal schools should make a clear statement of their relations to public institutions with regard to their practice work.

Especially has it been shown in this report that there should be clear and explicit tables setting forth the number of children accessible for practice work and the number of practice teachers who are supervised by a single critic teacher or normal instructor. There should also be a clear and explicit statement of the way in which this supervisory work is related to the other engagements of the normal-school teacher. If critic work is conjoined with instruction in the subject matter given in the normal school, this should be set forth in such a way that the policy of the school will be perfectly clear. In short, a definite statistical statement, together with a descriptive justification of the practices of the school, should be made a part of the regular report of each normal school, and it is recommended that this material be worked out in such fashion that a general comparison shall easily be possible.

Student's program is closely related to the type of work which he can do.—There is another body of information with regard to the administration of the course of study which should be brought out in these normal-school reports. A statement should be made of the amount of work which a student is expected to do in a year of work. There can be no doubt at all that in many normal schools the faculty, relying on the maturity of the students, administers a very heavy course of study. In all probability, it would be found that more hours are taken each week by normal-school students than are commonly taken by college students. It may be entirely legitimate to call upon normal-school students who are taking a professional course to exert themselves more strenuously than college students do. On the other hand, there can be no doubt at all that the student who would take advantage of leisure for reading and for general preparation of himself along the lines of his own selection is deprived of this opportunity by the heavy course which he is required to take in regular routine. Some definition of the policy of institutions in this matter would help greatly in adjusting the relation of normal courses to college courses. Very frequently a student who presents himself

for advanced standing in the university brings from the normal school a prodigious number of courses. This immediately arouses the skepticism of the university faculty, because they recognize the impossibility of taking so large a number of courses without curtailing the work in each. A definition, therefore, with regard to the amount of work of the student should parallel the definition that is called for above on the amount of work that is required of members of the faculty. An explicit tabular statement of the number of students who are taking four hours, five hours, six hours, etc., each day, would give a definite body of information which is not now at hand. That such information is not supplied by the colleges should not furnish justification for its omission from this report. The appearance of this type of material in normal-school reports would undoubtedly stimulate a discussion of the same problem in high schools and in universities, and anyone who makes a study of these institutions realizes that it will very shortly be necessary to canvass the whole problem of the amount of work that a student can properly be called upon to do each day. The relation of this discussion to outside activities is also clear. A definition of the social life of the students can hardly be given with clearness unless some attention is given to the amount of work which is required in the courses of the institution itself. By initiating this study, the normal schools can become leaders in an important general educational study.

Another general educational problem is that of the elective course.—A further item of information with regard to the students and their places in various courses is especially profitable when one considers the contrast between a normal school and the ordinary college course. In recent years the college course has come to be more and more an elective course. On the other hand, the professional schools have all required a much more rigid adherence to a prescribed series of studies. In the normal schools the conflict between academic and professional courses has frequently expressed itself in the fact that certain courses are required, while others are made elective, and the difference in equipment between different normal schools may frequently consist in the larger number of elective courses which are offered. These elective courses open the way for a wide differentiation of the course of study pursued by individual students and undoubtedly constitute the phase of normal-school organization which has brought these institutions most into competition with neighboring colleges. Furthermore, elective courses always bring with them the problem of the distribution of students of different degrees of maturity. When an elective course is open to students who have for some time been pursuing work in a given institution and at the same time to students who have just entered, there is likely to be so great a difference in the maturity of the student body that the administration of

the course is seriously complicated. Tables showing the kind of students admitted to certain courses, the emphasis which is laid in the natural course of election upon certain parts of the work in the normal school, and a clear statement of the registration in all of the required work would give a view of the distribution of the student body which it is very desirable to have.

Courses for mature students.—Furthermore, it is also important in estimating the work of the normal school to draw a sharp distinction between those students who are preparing to teach for the first time and those who are preparing in a larger way to increase their professional usefulness. In general it may be said that the summer school, or the summer quarter of the normal school, is very different in its character from the regular quarters, and throughout the year there are students who are taking courses of an advanced type because they wish to become supervisors rather than because they wish to enter the profession for the first time. A distribution of students throughout the year and a distribution of the students with reference to the ends which they wish to achieve through graduation should be made in such a way that one who examines the registration of a normal school shall distinguish between these different types of students and their length of residence during the year.

Problem of costs.—The period during which a student remains in the normal school is very important in determining the cost of normal-school instruction. It is desirable that every community should know what it costs per capita to educate students in any public institution. At the present time it is almost impossible, as indicated in an earlier chapter, to determine from the statistics of registration how many students are present in a normal school at any given time. The average attendance or the attendance for each month should be given in such a clear-cut way that it will be possible to determine what the actual instructional activities of the institution are. A large summer quarter does not legitimately represent the actual work of an institution. On the other hand, there can be no doubt at all that the constituency which comes to normal schools during the summer is very important in determining the character of work that is done in the schools around that normal school.

Clearness in these matters is all that should be required. It is not necessary to lay down any rule, and there should be no effort to restrict the activity of a normal school in dealing with the different types of students which come to it. But it is desirable that these different types should be clearly defined.

Distribution of graduates.—Finally, a normal school should inform itself, and should inform the State which it serves, definitely with regard to the distribution of its graduates. The first question which here arises is the question of distribution to elementary or sec-

ondary schools. In the second place, the question immediately arises whether these normal-school graduates go into city schools or into rural schools. A clear statement on these matters would do much to determine the policy of the State with regard to appropriations and with regard to the maintenance of normal schools. There can be no doubt at all that in the majority of cases graduates of normal schools go to those city systems which are much better qualified to provide themselves with experienced teachers than are rural districts; and there can be no doubt at all that the number of graduates of normal schools who go into high schools constitutes a very genuine problem of public policy. In some quarters there are small high schools which can not draw their staff from the neighboring State universities. The normal schools are here called upon to perform a very genuine service to the community. To what extent this service is demanded we do not at the present time know, and we shall not know until definite statements can be made of the actual disposition of graduates of our normal schools.

The problem of the relation of normal schools to high-school training classes appears also at this point, for if the normal school can not supply the teachers necessary for rural districts, other means will have to be devised for the training of teachers. The whole problem of an adequate supply for the State, therefore, connects itself with this investigation of the disposition of the graduates.

Some diagrams of geographical distribution ought to be given, but here, as in an earlier instance, it is important to keep in mind the fact that an academic distribution is of more significance than the merely geographical distribution. What kind of schools these graduates serve is a much more important question to raise and answer than the mere question of the geographical distribution in terms of miles away from the institution that trains them. Tables of this sort should be clearly presented in the reports of the normal school.

Standardization is an elaborate process and may be slow.—The recommendations which have been made in the foregoing paragraphs call for a number of elaborate studies, and it will doubtless be objected by those who are in charge of the normal schools that it is not easily possible to supply the information which is here demanded. It will especially be objected that to supply all of this information in a single report would require a devotion on the part of the president and faculty of a normal school to investigation which is altogether out of proportion to their leisure and to the demands which are made upon them for routine work. It must be admitted immediately that an effort on the part of any given normal school to answer all of these questions in one year would entail a great amount of labor. It is the meaning of the authors of this monograph that the labor would be amply repaid in the establishment of general confidence in the admin-

istration of the school and in the classification that would come as a result of all of these investigations of all of the relations of the institution and of the student body. But if the recommendations can not all of them be acted upon at once, it is still urged that a gradual accumulation of all of these types of information is certainly possible. If one or two of the tables above recommended could be prepared in a given year and could be inserted in the catalogue of the normal school, and if the practice of collecting such information became general, comparison would immediately arise which would stimulate further investigations and would help to secure the necessary appropriations from legislatures to carry on these investigations on a larger scale. The experience of every State has, in recent years, made it clear that there is public demand for a clearer definition of these institutions. The necessity of maintaining relationships with other institutions has been dwelt upon again and again in this report, and the desirability of supplying a larger body of teachers is becoming one of the impressive problems of modern educational life.

Lack of uniformity is advantageous if this is supplemented by careful scientific studies.—The United States does less to train its teachers than any other great civilized nation, and there is less uniformity in the treatment of requirements for the schools than in any other nation. To be sure, these variations in organization and this lack of system bring certain advantages and give the school system of the United States a certain flexibility which other systems do not exhibit, but there is no reason why with the advantages of flexibility there should not come a clear definition of purposes and a clear account of the actual achievements of such system as we have. The recommendations made in this chapter are made with a view to securing this type of information. Flexibility which is of a thoroughly self-conscious type is greatly to be desired. Flexibility which is controlled by accidents and by chance requirements in particular localities and is not understood and is not clearly defined in any general way is a disadvantage rather than an advantage, and all of the recommendations which have been made in these paragraphs aim to eliminate so far as possible the purely accidental character of normal-school organization.

OTHER PUBLICATIONS OF THE BUREAU OF EDUCATION DEALING WITH THE SUBJECT OF THIS BULLETIN.

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- *A teachers' professional library. Classified list of 100 titles. 5 cts. (Bulletin, 1909, no. 8.)
- *A course of study for the preparation of rural school-teachers. F. Mutchler and W. J. Craig. 5 cts. (Bulletin, 1912, no. 1.)
- *Training courses for rural teachers. A. C. Monahan and R. H. Wright. 5 cts. (Bulletin, 1913, no. 2.)
- *The training of teachers in England, Scotland, and Germany. C. H. Judd. 10 cts. (Bulletin, 1914, no. 35.)
- City training schools for teachers. F. A. Manny. (Bulletin, 1914, no. 47.)
- Efficiency and preparation of rural school-teachers. H. W. Foght. (Bulletin, 1914, no. 49.)
- The training of elementary school-teachers in mathematics. I. L. Kandel. (Bulletin, 1915, no. 39.)
- Normal schools. (Statistics.) Annual Report, 1914, vol. 2, chap. 6. (Available as a separate publication.)
- The training of teachers. S. C. Parker. Annual Report, 1915, vol. 1, chap. 7. (Available as a separate publication.)

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